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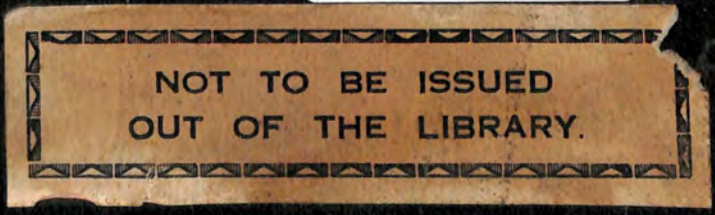
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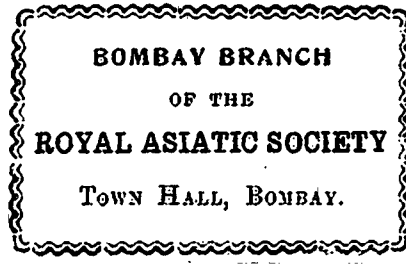

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ON THE

PHILOSOPHY OF PAINTING:

A Theoretical and Practical Treatise;

S. C. 15

COMPRISING

ÆSTHETICS IN REFERENCE TO ART,
THE APPLICATION OF RULES TO PAINTING,
AND GENERAL CONSIDERATIONS ON PERSPECTIVE.

S-C 15

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ac.

BY

HENRY TWINING, Esq.

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PREFACE.

No apology is perhaps expected, on the part of an amateur, for offering considerations on the philosophy or æsthetic tendency of art; for general principles concerning the polite arts are, or ought to be, included in those branches of study which constitute a liberal education: but any practical rules and advice which do not emanate from a professor, are expected to be withheld, unless there be strong motives for making them public. And although an acquaintance with the principal galleries in Europe may be greatly desirable for an amateur, and render more valued his opinions in matters of art, the office of prescribing rules and principles is nevertheless con-

sidered to belong to professional writers, who have indeed already, in a great measure, supplied every demand. However, the only justifiable grounds for the manifestation of any kind of ill feeling on the part of artists, in this respect, would be, the apprehension of a professional injury; and there may certainly be some reason why amateurs who handle the brush, or wield the pen on subjects connected with the fine arts, should abstain from pursuing any course which might be detrimental to this branch of instruction. The unprofessed writer can, perhaps, scarcely expect to escape censure, unless he keep strictly to those theoretical and general principles which artists have seldom the opportunity and leisure to investigate; or unless, when dilating on particulars of more limited influence, he place them in such a light, and consider them in such a manner, as will solicit more precise or more comprehensive explanation,—making it his constant aim to spread a desire for further inquiry.

The inducements which have led me, on this occasion, to outstep the usual limits of dissertations or criticisms on art, are not so much to be traced to a decided predilection and unwearied

zeal for this pursuit, as to circumstances of a very different nature. Weakness of sight, which compelled my submitting to a considerable degree of restraint in the absorbing practice of art, prevented a free and spontaneous realization of the impressions which had been formed on the master-works of Nature, and on the choicest productions of eminent men: but this circumstance led me the more to investigate the nature of the principles whose pervading and insinuating influence indirectly supplies these inexhaustible stores of intellectual enjoyment; and I was led to consider, with immediate reference to the process of painting, in what manner any particular schemes might be carried out most effectually, with the least fatigue to the organ whose delicate condition required so much attention. In this manner, I became the more conversant with the theory of art, in proportion as its practice was denied me; and what has been to myself a source of privation, may, perhaps, not be without its benefit to others, if I have been able to express sufficiently clearly and impressively, the truths which have been gathered with the help of experience and reflection.

There are ample reasons why it is desirable that the formation and guidance of a national taste, should not be left exclusively to those whose position and circumstances are such that their judgment cannot remain entirely unbiassed. The universal prevalence and applicability of art, combined with the powerful influence which it exercises on the mind and sentiments, render its effects decidedly beneficial or pernicious, according to the direction which is given to the cultivation of it in society. If one of its frequent callings be to amuse our volatile fancy, it must be remembered that, in its right and proper sphere, art becomes more or less directly the solace of the sick and of the infirm, for whom the consolations of the most charitable condolence would at length cease to avail, without the cheering and truly enlivening influence which art, in its various forms and characters, so extensively diffuses. If to this substantial good be added, the advantages of delicacy and refinement, which the cultivation of the arts extends to every subject on which the intellect is exercised, we must admit that it is raised high above all ephemeral and frivolous pursuits: and if desirable that it should not

practically be entrusted to unskilled hands, how much the more essential it is that its direction be kept entirely free from vulgar influence, and that, as of late years has been the case, the voice of men who stand eminent in art itself, and of those zealous followers who are not exactly included in its circle, be frequently and distinctly heard! Thus may art be preserved from falling, abject and degraded, in the midst of its lofty mission.

Writers on art, who do not confine their views to one particular school or country, but admit its influence as cultivated by different nations, may sometimes contribute effectually to dispel prejudiced, exclusive, and one-sided ideas; for the more art is generalized, the less likely is it to fall into a condition of self-sufficiency which discovers beauties in that method only of interpreting nature, to which the eye has been long accustomed, and the mind gradually trained. Its influence will ever become the more beneficial, in proportion to the extent to which it diffuses kindred tastes and feelings amongst various nations.

Doubts have been continually raised as to the

expediency of rules and principles as applied to art. But have those who entertain such doubts well considered if there be any cases at all to which rules may be applied; and, if so, to what extent they may be made available? Let the question be entered into, and precise limits assigned to the use or withholding of rule, and I believe that few minds, at all conversant with art, would maintain any further doubts as to the utility, and indeed as to the occasional necessity, of guiding principles. Even in science, practice is sometimes placed, by the ignorant, above theory, because it is practice which realizes the immediate and visible result; but without theory —without the first application of the principles of force and motion,—what would practical skill have to act upon, or what results could the greatest manual dexterity produce? Very different, however, are the limits assignable to theory, in mechanical sciences, and in art. Rules, as it has been generally admitted, are no substitute for genius. They would never have produced the Galatea, the Transfiguration, or the School of Athens. But if instances have been afforded,

of genius combined with a judgment so true, and a taste so pure, that rules became impotent and useless, it is not its characteristic to afford secure and unfailing guidance, either in the planning or in the execution of a work. Theory would indeed be worse than useless in the art of painting, were it to claim, as its special office, to rule the inspired thought, and to assert principles of grace in the lively creations of the fancy. Its advantages are chiefly shown in correcting the errors, and in chastening the productions, of those who want the penetration and experience necessary to proceed unguided. A more extended knowledge of the principles on which art is founded, might not add many to the best of the yearly productions of our artists, although it might diminish immensely the number of the inferior ones; and by thus rendering the attainment of that which is at least genuine and good, more easy and certain, it doubtless confers a benefit on art in general, which ascends less obstructed, and, it may be, to a loftier position, when seated on the foundation of truth, than when based on inconsistency, chance, or extravagance. The baneful influence which Mr. Payne Knight in

particular ascribes to the application of theory in art, is chiefly limited to those lyceums and academies which he sets forth as examples of its pernicious effects. When rules are imposed with authority, and precepts set forth with an assurance not to be controverted, their tendency is to curb genius, and to arrest the onward movements of persevering industry; but a plain enunciation of the principles which govern alike external nature and the various modes of imitation which art adopts, can have no injurious influence, when received willingly and without bias. If any danger may arise from this kind of inquiry, it is encountered entirely by the inquirer himself. He, indeed, tests theories, engages in the thankless work of probation, sows, and reaps perhaps that which is unprofitable; but the failures of such attempts fall upon himself. No stranger to these researches—no harmless patient, (can as much be said in favour of another very necessary art?) suffers in the acquirement of that experience which can often be gained but by experiment. The inquirer after theory, may lose, in the perplexing solution of a problem, that fire and energy which are neces-

sary for carrying out a great design—perhaps, indeed, part of the feeling with which he hoped to embellish and elevate his aim; but he who finds the problem already solved, and who proceeds on principles which his reason admits, without having striven to unravel them, has no incumbrance in the pursuit of his object; and, whilst his judgment has been enlightened, all the enthusiasm and sentiment which accompany him in the pursuit of art still remain.

Owing to the remote and indirect nature of the influence which is exercised by theory, it is impossible to say what may be its extent, or, what art might have been if sound principles of taste had not, from time to time, been proclaimed by such men as Winckelmann, Raphael Mengs, and Reynolds. Far enough from the true path, has the spirit of innovation, vanity, and mannerism, already led the art of painting, in the very countries in which it shone with the purest lustre. Still more wild and eccentric might have been its course, had not a firm and experienced hand now and then assisted in leading the way, and in pointing out a great and useful end.

What do we perceive if we examine the usual

course of the progress made by any individual in art? From the earliest, I might say infantine, attempts at drawing, we may trace a change in the ideas entertained with regard to imitation, which is commensurate with the progress of the performer, and which certainly cannot be due to the exercise of the hand alone. The child, and the uninstructed in art, alike seem to consider it of the greatest importance to omit nothing which they are able to see. Continuity of form appears to them a point of first necessity. A boundary line, studiously even and unbroken, of an object so situated as to afford the fullest view, is deemed the best and most natural expression of it. This impression is but conformable to the first notions entertained concerning the appearance of objects; such notions being entirely referable to the most familiar and habitual associations. The feeblest apprehension is aware, that every creature, whether destined for the air, the water, the meadow, or the road, has a calling different from that of its neighbour; and to such gross and evident distinctions as these, are the earliest attempts at drawing directed.

The step above this, which is not attained

without instruction in art, is that in which effect takes the place of servile delineation. Expression becomes, here, substituted for the dullest assertions of form. Some parts are made prominent, whilst others are kept in retirement, or entirely out of sight. The horse, or the ox, appears before you in a lively and distinct image: but count its members, and you will perhaps find that all are not indicated. Some are concealed; others are kept in obscure shadow. Yet the horse thus painted with effect, may appear to stand quite as firmly on three legs, as did a first attempt at one on four; and the comparatively few parts which are made distinct and conspicuous in this second stage of the art, give a more lively impression of the whole animal, than did the delineation of its entire form, scrupulously but spiritlessly completed. Thus, as the knowledge of art increases, the attention is gradually withdrawn from the most conspicuous appearances of nature, to be directed to those effects, less obvious to the understanding, which chiefly constitute the ease and gracefulness of every scene.

"Draw objects as you see them" cannot be

urged, even with reference to nature, without explanation; for many things there are, which are not perceived though present, and many others which, though almost absent, become, with regard to their influence, strikingly prominent. The reflection of trees in water, is put in by the earliest beginner; because reflection, though not a primary fact, is one so generally and immediately connected with our enjoyments, that it is not easily forgotten: but to the query,—is the reflection to be of the green colour of the trees, or of the muddy colour of the water? the answer, or the course to be pursued, might not so readily suggest itself; although, if the water were muddy at all, there could hardly be any doubt that the reflection would be of the colour of the water; and if there were a slight but sharp ripple, the reflection of the tree would in some cases be swept away altogether. With regard to the tree itself, as it is composed alike of branches and foliage, the beginner is induced to put in circumstantially both; although, perhaps, the leaves, and a portion of the trunk, are alone distinctly visible. Many such examples might be adduced, to show that a general and

most superficial observation of nature, chiefly influences the ideas which are first entertained with regard to imitation. The inexperienced gives undue importance to those things which are connected with definite and useful purposes, and disregards those of which we are not reminded by our necessities, and whose nature is indeterminate and variable: whereas, the experienced in the art of painting, frequently substitutes effects which are indirect and remote, for those which are conspicuous and evident; knowing this to be one of the most efficient means for obtaining softness, ease, and all those qualities which are opposed to formality.

The third stage in art, is that in which sentiment and feeling are the predominating principles. An ingenuous love for the beautiful in nature, here supersedes the happiest results of tuition: and the work of art which so overflows with the sentiment infused into it, that the spectator becomes a necessary sharer in those emotions, is raised to the most honourable station. But it is in this most delicate period of the art, that those resources which are the result of long experience and practice are most required. Their

deficiency causes the language of inspiration to be intelligible to the performer only; and their neglect converts the brightest images of the fancy into wild and disconnected abortions.

The present volume is intended to form the complement of the "Elements of the Picturesque," hitherto printed for private distribution only, and which is of a more descriptive and less theoretical character. One work is, in some degree, dependent on the other; and the entire subject will become complete, only with the intended publication of the volume on the Picturesque.

In the plan of this work, the materials naturally divide themselves into three parts. I have appropriated the first to general and theoretical information, including an exposition of the views entertained by various authors on subjects more or less immediately connected with the fine arts. I believe such preparatory training to exercise a beneficial influence in the cultivation of art; but should it not have these advantageous results, it may be not the less essential that the reader be made acquainted with the leading theories entertained concerning

the influence of the external world on the impulses of man,—that his mind be set at rest with regard to such controvertible points as most readily suggest themselves, and that he be spared the many useless speculations which he might be induced to make, did he not find the ground already surveyed before venturing upon it. A second division comprises those subjects which are more practically connected with imitation and composition in the art of painting: whereas, I have reserved for the third part, remarks on Perspective, including projected shadows and reflection. The plan which I have chiefly aimed at, with reference to these last subjects, has been that of assembling, and bringing to bear upon each other, distant points of connection; endeavouring, by a collective and generalizing survey of the principles which have the most extensive influence in these branches of science, to afford a view of the broad and massive groundwork whereon is raised the fair superstructure which is usually exhibited to our view. At the same time, aware that I have but opened this phasis of the subject, and but partially withdrawn the veil which intercepts our glance, I anticipate,

from the endeavours of others, the entire removal of that dimness which seems to obstruct our searching inquiries into the problems of perspective, whenever our investigation extends to the foundation of its principles.

Conformably to the nature of the subjects treated of in the present work, it may be expected to afford that kind of satisfaction which generally succeeds to the acquirement of information, rather than that fleeting amusement which is the result of temporary excitement. It may be therefore suggested, that the perusal of the book should not be left to those moments of lassitude and *ennui* when the mind feels the want of an exhilarating principle, but rather that it should be taken up when there is the vigour necessary for sedulous application, and a desire to master some new inquiry with regard to art. It may be further suggested, that the part on Perspective, which requires most attention, be read simultaneously, that is in connection, with the first and second parts; but reading combined with the exercise of the art of painting, may be deemed here, as indeed in all similar cases, especially advisable. The validity of the

remarks is thus at once tested: besides, nothing impresses more any acquired information, than the carrying of it into practice. Such hints as these may look something like the doctor's prescription, where the manner of using is, or ought to be, always forwarded with the drug; but if books are to be in any degree useful, as well as entertaining, there can be no reason, adducible either from logic or from good sense, why the manner of using them most calculated to prove beneficial, should not be plainly stated.

As the practical remarks which are contained in the following pages are in no wise founded on materials borrowed from other works, I have rarely had occasion to allude to the excellent modern treatises which have been published by some of our most experienced artists; the many references which will meet the eye of the reader bearing chiefly on those works of more ancient date, which have treated of art philosophically; an insight into which seemed best calculated to afford the general information necessary to prepare the mind.

The course which I have pursued in the theoretical dissertations of the first part, has

seldom led across the path which the Graduate of Oxford has hitherto chosen. His important work, entitled "Modern Painters," admirably calculated to stir up men's feelings, to inspire them with a lively relish for the scenery of nature, and to give to modern art a new and vigorous impulse, seems less especially intended to point out means and ways. What may still come forth from this able and eloquent writer, is yet unknown; and it is not impossible that the similarity of our respective aims may produce some slight clashing either of facts or of impressions. This would not lessen the value of any new position gained on either side. Exertions applied from different quarters on a similar object, not unfrequently lead to the same result. However this may be, competition always engenders progress, and useful truths are seldom elicited without extensive and various research.

It may perhaps in general be found preferable to exclude illustrative plates from works on art, unless the author, by executing them himself, is able fully to carry out the principles and effects which it is his object to explain. The impossibility for any individual to enter fully

into feelings and impressions which are not his own, and to represent certain characteristic appearances of nature which he has not witnessed, necessarily renders very uncertain the success of any illustrations which are not planned and carried out by the same mind. On the other hand, a work on art, without illustrations, appears incomplete. The rejection of the very means and resources which art supplies, seems an injustice done to her, and tends to engender feelings of doubt as to whether the principles advanced are susceptible of realization by the means which she places at our command. These last considerations have determined my intermingling a few plates with the letter-press; although the limited care and attention which I have been enabled to bestow on them, have prevented their being executed with the usual advantages. An impartial reader will, however, bear in mind two facts: firstly, that the plates are not intended to illustrate the effects of nature which are most beautiful, but those which are important, as being the usual results of certain determinate causes; and, secondly, that the text refers to the most efficient and powerful means

which art supplies for attaining the effects intended to be exemplified, whereas the pages of a book admit but of a very limited and inefficient means of representing nature.

With regard to the plan of dictating, to which I have had recourse, the difficulties attending it have been fully compensated by the patience, zeal, and perseverance of my young assistant Mr. G. Webster.

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ERRATA.

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PART I.

ÆSTHETICS

CONSIDERED WITH REFERENCE TO ART.

INTRODUCTORY.

After contemplating the romantic beauties of natural scenery, the thoughts of the observer are often cast back upon himself, and he feels a desire to penetrate the recondite springs of the pleasures of which he has partaken. The inquiry perhaps suggests itself, Is this large share of pure enjoyment owing to a secret intelligence between the mind and external nature,—to affections silently communicated, and incapable of interpretation by language; or is it the property of every object to convey those impressions only, which are akin to its own nature? Do emotions of awe alone, prevail where rocks threaten danger; or none but those of repose, where the sea is calm, and the course of the stream placid?

However absorbing the interest of such reflections, when in the presence of nature, they can be expected to unravel but very imperfectly, the mystery which envelopes the inquiry. If the dimness which now and then creeps over the surface of the problem may be partially removed, its depths must remain unfathomed, and its recondite principles ever unrevealed to the searching ray of intelligence. Most authors, indeed, who have investigated these subjects, have generally set off with a laudable resolution of giving up as vain, the discovery of the primitive source of the pleasure which we experience as we behold the beautiful objects which surround us; though, in many cases, the interest which is involved in such an inquiry has led them to go further than they would willingly have done: and I much doubt, whether to this difficulty of fixing, in so fascinating a subject, the limits of plausible research, may not, in a great measure, be attributed the errors and the contrariety of opinions which arise in discussions of this nature. There is no kind of evidence, on this point, to be deduced from reasoning, which will not appear feeble when compared with the liveliness of first impressions, unbiassed and uncontrolled. The inquiry into the nature of the passions and emotions, ever remains forbidden ground to the scrutinizing mind; whereas, a discreet forbearance begets the more tardy but satisfactory solution of experience. At the moment when a strong passion or an absorbing emotion sways the mind, no time is left, and no care entertained, for investigation concerning its origin or nature; all research is adjourned for tranquil moments, when the calm but

unexciting voice of reasoning is alone heard. If, on the other hand, curiosity become the prevailing sentiment, the passion (say admiration, or wonder,) to which the powers of the intellect are directed, must fall in the scale: it is no longer that unbounded emotion which enthusiastically swells the breast when uncontrolled by calculating reasoning; and curiosity sees the object which it intended to scrutinize, escape from its grasp. It would be, therefore, vain to busy ourselves much with the essence of the pleasures which we receive through external causes.

Emotions similar to those which are inspired by the works of nature, are raised, it is true, by poetry, by poetical description, and by oratory; and the brilliant energy of the images, and their rapid succession, may at times render the emotions thus excited, more vivid than those produced by nature herself.* This is the power of reviving and concentrating impressions first acquired by natural causes; but it does not disclose their nature, or even approach to the explanation of it. The attempt

* Mr. Payne Knight, a contemporary and friend of Mr. Price, as deep a thinker as he was a shrewd logician, remarks, that the impressions of the sublime may be greatly increased by poetry, in which the energetic qualities of objects are seized upon, heightened, and embellished by eloquence. He likewise ascribes to the art of painting, a similar power of heightening the expression of sublimity, although in a less degree; "since poetry," as he observes, "is confined by no laws of strict imitation, but may bring forward those qualities only of an object, which suit its purposes, and leave all the rest entirely unnoticed. It is not under the necessity of expressing mental energies through the medium of corporeal form, but darts them at once upon the mind; and thus, without departing from the truth of description, gives sublimity to objects whose bodily deformity, weakness, or minuteness, might prevent them from appearing so in reality."—*Analytical Inquiry*, part iii. chap. 1, par. 75.

to do so, by mingling argument with poetic description, would at once chill the emotions which are raised by eloquence.

More profitable would be the task of observing the kinds of emotion which are most generally and most strongly associated with the leading forms and aspects of nature, and of considering the impressions we experience in connexion with them, with a view to the improvement of taste in the delineation, as well as in the distribution and grouping, of natural objects. In representations of the human figure, whether in colour or marble, the attainment of expression and character is facilitated, and rendered more certain, by acquaintance with the nature of the passions themselves; and although the primary causes of emotion which are founded on the aspect of the inanimate creation, are vague and little definable, compared with the expression of emotions in the human features, where effect and cause are combined in sympathetic union, yet it cannot be doubted, that by the exercise of discriminating observation, the judgment may be enlightened with regard to the appreciation of the great and beautiful in landscape nature, as well as in the figure. In both classes of subjects, the emotion becomes void without the object which gives rise to it; as, without the emotion, the object itself is meaningless. The study of our internal impressions and emotions, in reference to the inspiring causes, tends, therefore, to expand the mind, and to diffuse truth, precision, and taste, into the various operations of the intellect. The mind, thus instructed, mistakes not altogether the nature of the sensations

which it is to expect from each characteristic expression of nature; and those impressions and emotions which, in the natural objects, are most harmoniously and happily blended, become, as discernment is increased, associated together with the greater propriety and effect, in the productions of art.

A distinction of the impressions which are connected with the productions of nature and art, may be made in two ways: firstly, by taking our impressions as distinctions; in which case, certain classes of objects are grouped together, according to the nature of the impressions or sensations excited by them,—as, for instance, a certain class of objects inspires us with impressions of the sublime, another class of objects with impressions of the picturesque, a third with impressions of the grotesque, and a fourth of the mirthful, and so on. Our impressions are, in these cases, centres, or axes, round which objects partaking more or less of these characters, are grouped. The expression of the object is considered to be founded upon the nature of the emotion with which it is connected, and those characters which have no connexion with this emotion, are disregarded. Thus, if it be our intention to give to the features of a landscape the expression of the terrible, or to those of a countenance the expression of severity, we banish from our thoughts all emotions having an opposite tendency, and admit only to the council-chamber of our reason, those which are conducive to the particular character which we design to impress on our subject.

Another view of the relations which objects have

to the emotions excited, is that in which the latter are not sufficiently marked and definite to form a characteristic distinction. They are too faint, or too equally mingled, that the expression of the subject be founded upon any one of them in particular. It ceases to be characterized by sublimity, by mildness, or by any other similar qualification; but although no one of these emotions connected with it is sufficiently predominant to give its cast to the scene or object, their mingled union may still be necessary to its perfection, or pleasing effect. Thus, if two heads express firmness, dignity, benevolence, and grace, so proportioned and blended in each, that we are scarcely able to tell which of the two may best claim any one of these characters, their more successful union in one figure than in the other, or their propriety and becomingness with reference to the subject, may afford us the means of pronouncing at once for one of these objects of art in preference to the other. Whenever it has been designed that the emotions connected with any subject, be so mingled in the expression of it, that no one of them would appear predominant, it becomes necessary to take for our guide, that instinctive appreciation of forms which discovers differences of expression, even when the emotions connected with them are various and indeterminate. In the first supposition, a direct appeal is made, in the work of art, to some particular emotion or passion, and character and expression become its chief merit; in the other, its excellence depends on the perfect and natural union of various expressions in the same subject,—grace and ideal perfection become

the aim toward which every thought and energy is directed.

We shall not, however, so far pursue those analogies and distinctions of objects, which are based on the similarity and difference of the impressions connected with them, as to lose sight of those natural and familiar distinctions which are quite independent of the emotions which these objects are the means of exciting. These distinctions are such as are entirely founded on circumstances of appropriation to our use, either physical or intellectual. For instance, although a mountain, an oak, or an animate being, be capable, under particular circumstances, of impressing us with various emotions, yet, practically, these emotions have no share in distinguishing them one from another, or in marking the class of objects to which they belong. We have, therefore, with regard to the habitual pursuits of life, a distribution of objects, which, whether or not they may afford the interest of emotion, is founded upon principles entirely independent of our emotions. The distinctions here, are such as are founded upon custom; the physical sciences likewise adopt them, since dislike, approval, or admiration, have seldom any share in those arrangements and classifications of objects which science establishes: but, with regard to the fine arts, to every branch of which the emotions of the mind extend their influence, the only divisions which appear to have been adopted, apart from the dictates of taste and feeling, are those which mark the styles; namely, the figure, the landscape, and the ornament (considered as the associate or basis of architecture). Although various

emotions may prevail indiscriminately in these different styles, or in the objects comprehended by them, they cannot affect or alter the distinctions which correspond with the leading, or even with the subordinate, branches of art.

I will next allude to the distinction of those terms, which are used to designate the characteristic expressions of objects, from those, which, in their usual acceptation, imply merit or excellence; a point which it is very desirable to determine before commencing an argument in which such terms must frequently occur. The expressions which are used to designate unqualified excellence, in objects affecting the sense of vision, are few in number, and, strictly speaking, almost wanting. The terms "admirable," "charming," and "engaging," are used generally, and the expression "beautiful," by some critics, and not by others, to imply that which is attractive in objects, without any reference to the particulars which render them especially pleasing. "Admirable" and "charming," which are chiefly used as adjectives, admit of no other signification; but "beautiful," or the substantive, "beauty," has been frequently used by writers on art, to imply a particular kind of excellence, which Alison has called the emotion of beauty. Much confusion and waste of argument have arisen, from the term *beauty* having been thus used to define some peculiar kind of merit, rather than to imply excellence or perfection. In the modern, as well as in the classical languages, the word, as applied to objects of sight, seems generally to designate *perfection;* and if it be not used to imply this quality equally in all

objects, it is chiefly because all objects are not susceptible of it in an equal degree. The word "beauty" is most used with reference to those objects, with which we connect ideas of the greatest degree of perfection. It is used, above all, in connexion with the human form and countenance, at the period of youth or middle age. It is less applicable to old age than to youth, to man than to woman; because it is with the latter age and sex that beauty of form is most habitually associated, with reference to the other qualities which constitute excellence in the human species.

It must certainly be allowed that, owing to the custom of associating impressions of beauty more generally with smooth and delicate objects, than with coarse and rugged ones, this term sometimes acquires, even in popular phraseology, a somewhat partial signification; and this is, perhaps, the more the case, as it happens that the objects which are beautiful from their smoothness, delicacy, polish, glossiness, and other shining qualities, are those which both come more frequently under our eyes, and concern us most. The softness and delicacy of the skin and complexion, the smoothness of the coats of animals, and of costly apparel, the high polish admired in works of art of all kinds, the general attractiveness of a clear sky in fine weather, are cases in which principles of smoothness, tenderness, or mildness, prevail in constituting the beautiful; whereas that beauty which is admired in wild romantic scenery, as well as in ruins, is of a kind more seldom met with, although the more pleasing for being rare. We cannot, therefore, be surprised that the term *beautiful* should

have been considered by some, less appropriate as applied to picturesque scenery, although such an application of the term be sanctioned by custom, than when applied to those more smooth and delicate objects which are constantly before us. Price, certainly, furnishes an ingenious parallel between the beautiful which relates to smoothness and delicacy, and that which is applied to the picturesque, by introducing a female, to whom he ascribes, in the first place, soft and tender features, and, afterwards, that complexion and appearance peculiar to a gipsy, or to a figure of the most grotesque description :* but, although his portrait of the delicate girl is alone conformable to our most customary ideas of beauty, it does not follow that the gipsy or peasant girl may not become an almost necessary part of a beautiful landscape, provided she be placed in such a manner, and with such accompaniments, that the general effect would lose much by her absence. In the same manner, the old and leafless trunk of a tree, although it should have an unsightly appearance in smoothly decorated pleasure-grounds, might add greatly to the general beauty of a forest or rocky scene. But, though the shattered trunk may thus become a beautiful object when suitably associated, it cannot be entitled to this appellation so generally and deservedly as an object which is beautiful whatever be its situation, or which appears to diffuse a charm on all that surrounds it. The beautiful, at the same time that it acquires from association a partial and generic signification, is, nevertheless, a term which may be used in

* Price's "Essays on the Picturesque," vol. i. p. 176.

a most general sense. This is the view decidedly taken by Mr. Payne Knight, who observes that "the word *beauty* is a general term of approbation of the most vague and extensive meaning, applied indiscriminately to almost everything that is pleasing, either to the sense, the imagination, or the understanding."* Notwithstanding the opposite opinions entertained by other authors, beauty, used as a generic term, might often advantageously make room for other expressions of a more specific and limited signification. In French and Italian, where considerable extension is given to the term *beautiful*, it is almost equally used to imply perfection in the features of both sexes, as well as of old age and childhood. This is shewn by the expressions "*bell' uomo*," "*bel vecchio*," and "*bel fanciullo*;" whereas it is known that in English the terms "handsome" and "fine" are more usually employed in connexion with the two conditions of manhood, middle and old age; and the term "pretty," with that of childhood.

Terms which imply generic merit are easily distinguished from those which designate pure unspecified excellence, if they will bear that a qualifying term be applied to them, as is the case with such expressions as gorgeous, sumptuous, splendid, fine, neat, and the like; all which terms of merit may be modified in their signification by the use of other terms, as is the case when a building is said to be gorgeous, but heavy; splendid,

* Payne Knight's "Analytical Inquiry," &c. introduction, par. 6.

but tawdry; elegant, but flimsy; sumptuous, but overdone. The beautiful, it is true, is not always proof against qualifying or depreciating terms, but such cases are exceptional; and, in discussions in which degree and kind are easily associated in the same idea, it becomes necessary, under the penalty of forfeiting the clearness of the subject, to adopt, with regard to each term, its most habitual signification; and, when degree and kind are alike expressed by the same term, it becomes important not to found on the general and extended signification, arguments which alone apply to the more limited and specific one. Quality and kind generally furnish the materials for dissertation, but it will not do to magnify these partial meanings into that importance which the term with which they are connected alone obtains as the expression of worth or excellence.

So natural is it for us to adopt, as principles, those views of a question, which we had first taken up accidentally, that there is danger of reasoning against our own conviction before reaching the end of a long argument, unless we determine carefully beforehand, the exact meaning of every term which might have an influence in forming our conclusions, and maintain that which has been first adopted, throughout the subject. Had Alison, in his dissertation on grace, not suffered himself to be guided by partial views, and consulted rather more than he has done, the popular signification of the term, it is probable that his theory would have been more conformable to the impressions entertained at large on this subject, and that he would have ascribed

to grace, characters very different to those which are the result of self-command and self-control.* He would, probably, have let flow the impulses of nature in many of those cases in which he has checked them; he would not have denied grace to the innocent joys of childhood, nor to the *abandon* of nature, in the unconstrained expressions of feelings and emotions, in whatever station of society the manifestation of such feelings and emotions might occur.† The association of the word *grace* with expressions which, like *self-command* and *self-control*, imply a certain degree of restraint, can only be the result of a very limited and exclusive acceptation of the term.

* The subjoined paragraph, as well as many others which I do not think it necessary to quote, shew that Alison ascribes emotions of grace chiefly to ideas of respect:—

"Every attitude or gesture of a well-proportioned form, and which is at once easy and expressive of some amiable or interesting feelings, is beautiful, and is accordingly spoken of as beautiful. But when we add the term *graceful*, we wish, I think, always to convey the idea of some additional quality which is expressive of some conceived dignity or superiority in the mind of the person."—*Essays on Taste*, vol. ii. p. 383.

† Alison observes, "Nothing, for instance, is more beautiful than the attitudes of hope or joy, or the gestures of mirth and innocent gaiety. We love them in the frolics of infancy, in the sportive activities of youth, in the cheerful *abandon* of rural dancing, &c. But it is rarely that we find the graceful in this tumult and intemperance of happiness. There is something, rather, that always borders upon the ludicrous, and the slightest exaggeration of the gestures is sufficient to make them the objects of laughter, rather than of admiration."—Vol. ii. p. 388.

ANALYSIS OF THE LEADING VIEWS WHICH HAVE BEEN ENTERTAINED CONCERNING THE NATURE OF THE BEAUTIFUL.

It might appear from a chance and unsystematic survey of the various opinions entertained concerning the nature of the beautiful, that the frequent adoption of a partial and one-sided signification of terms, in the exposition of general and abstract principles, has led to nothing less than a maze of conflicting theories. I will, therefore, introduce here, two or three of the most striking errors, or misapprehensions, which are ascribable to a too theoretical and limited conception of beauty, in order that we may, in the sequel, pursue unembarrassed, and in the path little trodden, of conciliation, the analysis of the opinions entertained concerning the nature of our emotions, with a view to infuse order and clearness into those operations in which the impressions and impulses of the mind are concerned.

Let us return to the causes of error which result from referring our pleasures of sight too much to abstract principles in the forms beheld. To what other cause can we ascribe some of the striking contradictions which appear in Alison's inquiries into the principles of beauty? For instance, in the pages on architecture, the beauty of which he makes to depend upon the fitness of the parts to the purposes of the edifice, associated with impressions of magnificence, he alludes to the beauty in the proportions of a column as depending entirely upon its aptness to the degree of

support required of it for the pediment, or roof. He multiplies the instances; and setting, in the first place, a single block on end; in the second, a column on the block, now become its base; and, in the third, the weight of the superincumbent portion of a building, upon the column; he ascribes to the supporting pillar different proportions in succession, according as it has become the support of larger and more burdensome masses, attributing, in each case, the apparent fitness of the object to the impressions we receive of its solidity. So far he may be near the truth; but, elsewhere, alluding to the impressions of beauty which are related to delicacy, he endeavours to impress upon his readers, that beauty, or at least elegance, is to be found in an eminent degree in the tripod; and this, chiefly on account of the ideas of frailty and unsteadiness connected with its form, requiring, to use his own expression, "care in the handling." I can see no apology for so evident a contradiction; and the apparent elegance of the tripod, if it possess that quality in an eminent degree, can only be accounted for by the tastefulness of the ornaments, which withdraws the attention from the insecurity of the object itself. His chapter on elegance and delicacy contains other similar contradictions. He acknowledges the flowing or sinuous lines to be a source of great beauty, as characteristic of weakness and delicacy; yet, elsewhere,* he ascribes a like merit to angular lines, as indicative of a higher degree of fragility, and attributes, particularly, great beauty to articles of glass

* Vol. i. p. 364.

cut in angular shapes, chiefly because the greater degree of fragility and delicacy connected with such forms, is conformable to the ideas we have of the frailty of the material. It is not improbable that the source of such glaring contradictions might be found in the attempt to give too much importance to these principles of beauty, and to ascribe to them too extensive an influence in different forms of matter.*

Burke, after rejecting proportion, fitness, and perfection, as elements of beauty, furnishes us with three principles of his own, namely, diminutiveness, smoothness, and gradual variation of surface. Payne Knight maintains, with well-founded arguments, that the ideas of perfection which we habitually connect with diminutiveness, are owing to the impressions of submission and harmlessness which form the usual accompaniment, or characteristic, of this condition; a circumstance which naturally engenders fondness and love. He shews contempt to be the predominating sentiment where deficiency or demerit is implied.† It would, therefore, be conformable to the opinions of Payne Knight, to allow Burke's principle to be true in certain cases only: its applicability cannot, at all events, be general, since the beauty which we admire in buildings, monuments, and landscape scenery, increases as these objects, or scenes, become more enlarged and expanded.

* The beauty of the angular forms which prevail in glass objects, might more reasonably be accounted for by the greater solidity which they afford as applied to so fragile a material, than from any principle of additional delicacy or frailty; and, in many cases, from the multiplicity of the reflected lights which result from a variety of angles.

† Analytical Inquiry, part ii. chap. ii. par. 107.

With respect to smoothness, a quality of far more extensive applicability than the preceding, most persons will, I think, admit it to be a source of pleasurable impressions in a great variety of objects; nevertheless, so little has Dugald Stewart deemed it an essential and necessary principle of beauty in objects at large, that he begins his argument on this point by stating that he cannot recollect any philosophical conclusion whatever, more erroneous in itself, or more feebly supported; but he immediately after admits smoothness to be one of the constituents of beauty in a great many objects, the cause of which he ascribes to the connexion between the senses of touch and vision.* Stewart gives as the other causes of beauty in smooth objects, the quantity and brilliancy of the light reflected by them, and those impressions of high finish and perfection which we naturally connect with such smooth articles as are the produce of art.

With respect to the gradual variation of surface, which constitutes Burke's third element of beauty, we suspect that the author, in alluding to the fascinating effects of those lines gently melting into each other, as he expresses it, had forgotten the maxim, which he recommends at the commencement of his essay, that in decisions of taste, the impulses which result from a calm perception of the beautiful, should be kept distinct from the allurements of passion. We can, indeed, scarcely apply this third principle of Burke, based on female

* The opinions of Mr. Payne Knight are entirely opposed to those conclusions which admit smoothness to form a constituent of beauty. See part i. chap. v.

beauty, to the more abrupt deviations of surface which characterize the bolder forms of the male sex; to the athletic frame of a Hercules, or to the sinewy limbs of a Centaur; far less to that beauty which may be traced, in deviations and transitions of all kinds, in natural scenery.

Mr. Walker, in his comments on the theory of Burke,* does not admit the general applicability of any abstract principles of beauty, such as those which form the basis of Burke's system. The argument substituted by him does not, however, entirely do away with the theory that certain essential principles of beauty do exist; but asserts the existence of different species of beauty, each of which he circumscribes within certain definite limits in the natural world. His arrangement of these principles, based on the three kingdoms,—mineral, vegetable, and animal, might serve very well as a definition of the elementary forms to be met with in these three kingdoms; but does not, it appears to me, point out, or does so but very faintly, any principles of beauty which, in the numerous divisions of nature to which he respectively assigns them, claim our attention or excite our admiration more than other forms would do. He regards the sphere as the first element of beauty in inanimate beings, as that to which the particles of matter, not subjected to pressure or violence, naturally adapt themselves. This may, as a physical fact, give some degree of interest to the globular form, since the circumstance that the sphere contains the

* Walker's "Analysis of Beauty," chap. vi.

greatest mass in the smallest compass, by rendering this form the simplest in nature, gives it a peculiar mathematical interest; but, independently of this, I doubt whether unprejudiced opinion would attribute greater beauty to the spherical or orbicular form than to many others more or less analogous. The orb of the rising sun often excites great admiration; but do not these impressions depend chiefly upon the accompanying circumstances of sunrise and sunset? And without these would the disc of the sun be more beautiful than other celestial appearances which do not present the orbicular shape, such as the crescent of the moon, Saturn with its rings and satellites, or some of the constellations? It may be asked, in reference to the question of intrinsic beauty in the sphere, whether there is any thing essentially more beautiful in the form of an orange than in that of a peach, because the former comes nearest to the sphere; and whether we do not admire the forms of these and other fruits, chiefly on account of their smoothness, delicacy, and the association of other pleasing qualities.

Mr. Walker points out, as a characteristic of beauty in the vegetable kingdom, or, to use his own term, in living beings, firstly, the rounded or cylindrical form of the trunk and stem in trees and plants; as though he inferred that the circumstance of their springing from the orbicular globe, caused the forms of those productions of nature in which the manifestations of life first begin, to bear a rude resemblance to that form which characterizes their mother earth. To these forms, closely allied to the primary ones, succeed, ac-

cording to Mr. Walker's theory, the forms which characterize the more tender and developed parts of the plant, as well as those which are peculiar to animals; all of which (such at least is the impression which this arrangement conveys) appear to deviate progressively from the primitive form of matter, as they become more remotely situated from it in the scale of existence.

I will observe, with respect to these leading features of Mr. Walker's theory, that it may be highly interesting to examine, as a subject connected with the study of natural history, the forms assumed in succession by matter, from its rudest state to that of the most perfect organic developement; but, as connected with æsthetic pleasure, or with our appreciation of the beautiful, such an arrangement must, I presume, fulfil its object very imperfectly. It is not the trunk of a tree unusually cylindrical, or any curve of a bough taken by itself, which excites our admiration, but far more the general form of an entire tree, or of a group of trees. Perhaps a flower will make us turn out of our way still further to behold it than any of these; or else some other object, or association of objects entirely different in their nature; and I presume that if we search for principles of beauty, we should look for them, in the first place, where their captivating influence lays the strongest hold of our fancy. Beauty —I mean that beauty which captivates—strikes us in a multitude of dissimilar ways. In most cases, there is no uniformity of relation between the degree of interest and the physical conformation of the object.

With a difficult and ungrateful purpose, like that

which Mr. Walker seems to have aimed at, of associating the various elementary forms presented by nature with distinct principles of beauty, I am not surprised that, after a persevering investigation of various authors, he should have lamented, in somewhat bitter terms of discouragement, the confused condition of the materials presented by them, and the difficulties which the nature of the subject presents. 'Nature everywhere abounds in beauties, or in features fitted to excite pleasurable emotions; but it is not in the physical structure and conformation of her parts that she addresses herself to the imagination.

Let us now examine whether the observation of nature may lead to the discovery of what may be called an essential principle of beauty. If, in that almost infinity of forms in which nature presents it, this quality strikes us more forcibly, or excites in us livelier impressions of pleasure, in some shapes than in others; or if we observe that certain forms of beauty have a greater prevalence than others, and that their influence, instead of being limited to one class of objects, extends over several; or if we observe, again, that a slight deviation or falling off from these characteristics of beauty, produces a sudden and striking deficiency of this quality; we conclude that there is something more in these forms than what others usually possess, which justifies the distinguishing appellation of a principle of beauty. Yet if we come to this conclusion, as we perhaps might do to a limited extent, we have not yet determined the point, whether the greater amount of beauty which is exhibited by certain forms, may not be due to situation

and circumstance; that is to say, to the association of ideas, which are either connected with such forms themselves, or which result from their combinations with other objects. The question, whether there exist abstract principles of beauty, that is to say, principles involving an extraordinary degree of beauty, independently of circumstance and situation, still remains. We can scarcely fancy a principle of this kind to be otherwise than unique, since we cannot admit several principles of beauty, without supposing them to differ, nor can we reasonably admit this, without supposing these different kinds of beauty to be subject to degree —that is to say, to afford unequal grounds for approval and preference; but, were the principle of beauty unique in its nature, objects of the most dissimilar kinds would be more or less beautiful, as they partook, to a greater or less extent, of the supposed primary cause of all perfection with reference to form. Does this supposition agree with the various impressions of the beautiful, which are associated, even by the same taste and judgment, with dissimilar objects? But the dissimilarity of tastes renders it at once impossible to come to any conclusion, in this particular, equally satisfactory to all opinions; we may, however, briefly consider a few of the most essential points.

I will examine, in the first place, whether there are any forms, concerning which we have sufficient evidence for concluding that they are beautiful in themselves, independently of any kind of association. Of these abstract forms, those which I believe are most generally admitted to be beautiful, or to affect us with

unmixed pleasure, are the sinuous or waving lines set forth in the first place by Hogarth, and admitted, I believe, by most subsequent writers, to possess a greater degree of beauty than straight or angular lines; but whether even these lines would have any unusual claims to this quality, without the associations which we so naturally connect with them, is a question which appears to me far from being decided. The associations connected with waving lines are all of a pleasing character. This form is, as Stewart and Alison agree, a characteristic of tenderness and delicacy; but it is, moreover, the undeceiving mark of youthfulness, health, activity, and, I think I may add, of life, since the winding forms become less apparent, and often disappear, where the vigour of organic existence fails; whereas, stiffness and rigidity are represented by straight and angular lines. Since, however, the winding line possesses, in appearance, some degree of beauty, independently of any immediate and visible connexion with these associations, it may be considered to have unusual claims to that kind of distinction which is designated by the epithet "self-beautiful." This acknowledged superiority of the waving form over the straight one amounts, however, to nothing more than an indeterminate and sweeping consent that one class of forms is preferable to another, and does not give the superiority to any particular curve, since Hogarth does not state the degree or the progression of the curvature required in order to constitute the most beautiful line.

With respect to the other principles or constituents of beauty discoverable in nature, they have still less

of an abstract character. Their influence or applicability is remarkably vague and indeterminate, and is alternately supported and contested by different authors. For instance, alluding once more to the beauty of the sphere, maintained upon the principle of its simplicity, we find it opposed by that very principle of curves having no common centre or focus, which Winckelmann, Burke, and some others after him, acknowledge to be such an important characteristic of beauty.* Elsewhere, namely, in Home, quoted by Walker, we find the square preferred, upon the same ground of its simplicity, to all other angular forms, such as the parallelogram, and other more complex angular figures; whereas Alison, guided probably by the opinions of Hutcheson, prefers the more complex, though regular figures, such as hexagons, octagons, &c. to the square. If, therefore, we can hardly admit one principle of beauty upon the grounds of general consent, how can we explain those endless variations of the beautiful which are characteristic of nature?

If we now consult Hutcheson, whose views first attracted considerable notice in England, and to some extent on the Continent, we find a principle of beauty applicable in some cases, but almost untenable in several of the others to which it has been intended by the author to apply. The principle to which he ascribes so general and pervading an influence, is the combination of uniformity and variety, the best and most

* Winckelmann observes, "The forms of a beautiful body are composed of lines whose central point is continually changing, and which, though always curved, never describe a circle."--- *Histoire de l'Art*, vol. i. p. 258.

appropriate examples of which he points out to exist in the regular figures above alluded to, such as pentagons, hexagons, octahedrons, dodecahedrons, &c. So far his theory may be plausible, for in figures which bear no particular mark of design or purpose, uniformity or simplicity becomes a no small degree of merit, and there is no doubt that the addition of variety renders these figures more pleasing to the sight; but, whenever uniformity loses its purpose of imparting simplicity and regularity, we find that other forms, such as those of trees, plants, and fancy ornaments, of which the parts have not sufficient connexion between them to constitute what is generally understood by uniformity, please equally well. And, towards the conclusion of his essay, Dr. Hutcheson appears to lose sight of his original purpose in the combination of variety and uniformity, by referring to the unity which prevails in the organization both of plants and of animals, as being connected with the variety everywhere conspicuous in their forms or actions; thus absurdly associating to the characters which affect the sight, those principles of internal mechanism and structure, the beauty and adaptation of which only manifest themselves to us by examination and research, and which, therefore, form of themselves a perfection in their varied uniformity, differently appreciated, and quite distinct, from the external forms which immediately fall upon the eye.* Thus we find a principle, which in some cases may be conducive to

* See Hutcheson's "Inquiry into the original of our Ideas of Beauty and Virtue," Essay 1. p. 22, and following pages.

the pleasures of sight, become weak and untenable, as soon as it is swelled up to the prevalence and importance of a general law. If, instead of affirming that those forms contain most beauty which associate the most variety with the most perfect uniformity, Hutcheson had maintained that it dwells chiefly in those forms which combine with simplicity the most abundant sources of emotion, he would, perhaps, have come a step nearer to the truth, though he would have equally failed in pointing out the signs by which beauty, in its perfection, or in its varied characters, is expressed.

Diderot, in the article *Beau* of his Encyclopædia, ascribes our perception of the beautiful to a system of relations in the forms of objects. Stewart makes, in a few words, a rather severe and contemptuous comment on this theory, for which he is in some measure justified by the importance and universality of Diderot's claims. But, setting aside this too great presumption, (which, by the by, is seldom found wanting when favourite theories are propounded), it appears to me that Diderot's principle contains in itself a great deal of truth, and that its developement throws considerable light on several parts of the question. If the author flattered himself, that by pointing out the relations of forms and things he gave an explanation of what beauty consisted in, and taught us infallibly to discern the beautiful from the misshapen and ugly, Stewart may be right to the full extent of his accusation; but if Diderot, as seems most consistent with the nature of his arguments, relinquished so great an aim for that of diffusing more general and clear ideas concerning

the attributes of beauty, as manifested in the various forms of objects, his acute researches fulfil their purpose. The ideas which are connected with relations certainly go very little way towards designating any type of the beautiful; the importance of these principles arises from their being indispensable agents. The painter or the sculptor would soon find out that, unless he maintained certain due relations between the parts of individual objects, or between various objects assembled together, he would make few steps towards the accomplishment of a work of taste. If he designedly alter the proportions of his object, every relation of form must be altered conformably, or its character of beauty would instantly vanish. Thus, the influence of relation extends to proportion as well as to kind. Its prevalence is, in fact, illimited. Without relation there could be no distinction; consequently, no diversity of form or character. Design, fitness to purpose, symmetry, proportion, and expression, and other such acknowledged principles of beauty, are all connected with, and dependent upon, the coexistence of relation of parts; but from this very generalization of the term it loses all worth as a specific test of excellence. We, moreover, discover beauty in nature, when the objects presented to us seem to afford differences, rather than relations, as is understood by this term in vulgar phraseology; for we admire greatly, in a landscape, the union of a cottage and trees, of mountains and water. Technically speaking, however, it may be said that these very differences are relations; and, in fact, the whole of nature affords nothing but

relations, taken in this sense. It will, therefore, be not very difficult to see that relations, unless explained, qualified, or specified in a particular manner, will not guide us far in the discrimination of the beautiful. Diderot's merit is in having shewn the far-extended and perhaps universal influence of relation, and in having, it appears to me, sufficiently proved, by well-grounded argument, that this principle absorbs, in its comprehensive and all-pervading influence, all minor and more particularizing definitions. Diderot adduces very happy instances, taken from passages of poetry, to prove that language owes its force of expression to relation; and though, with regard to form and distribution, the influence of this principle may not at first sight be evident, its importance in colouring becomes at once conspicuous and striking, as we have no harmony, nothing even gratifying to the sight, without certain arrangements and relations of colour.*

Let us now consider those conditions or circumstantial principles of beauty, respecting which, with very few exceptions, all authors who have treated this matter agree, namely, proportion, regularity, and symmetry, conditions which are intimately connected with the important principles of fitness and design, of which they are in general the expression.† The predominance of regularity and symmetry is chiefly apparent in objects of art and industry; but the principle of symmetry is likewise manifested, throughout the animal kingdom,

* See "Relations of Colours."

† See Alison's opinion on Design, Essay II. chap. iv. sec. 2.

in the conformity of the corresponding parts or lateral halves of each individual. We must not, however, forget that these are conditions which involve, it is true, certain classes of forms, but do not themselves constitute any determinate form; as, for instance, regularity and symmetry demand corresponding shapes at corresponding intervals, but do not determine the precise nature of those shapes. They may, however, to a certain extent, be entitled to the appellation of principles of beauty; firstly, on account of their extensive influence in the works both of nature and art; secondly, because the impressions connected with them are of a nature precise and definite, whilst the least deviation from them, produces a marked and striking falling off in the beauty of the objects to which they apply.

The prevalence and importance of regularity and symmetry are, doubtless, to be ascribed almost entirely to the circumstance that our wants and conveniences are best supplied, either directly or indirectly, by forms based upon these principles; and the habit of associating the forms of objects with the purposes which they best fulfil, induces by degrees the conviction that these forms are, in themselves, the most perfect, and that they are the marks of design.

Hogarth has given, in the following lines, a very ingenious and striking demonstration that it is to ideas of fitness, and not to proportion as a mere mimicry of counterparts, that regularity and symmetry owe the beauty which we connect with them. "If the uniformity," he observes, "of figures, parts, or lines, were truly the chief cause of beauty, the more exactly

uniform their appearances were kept, the more pleasure the eye would receive; but this is so far from being the case, that when the mind has been once satisfied that the parts answer one another with so exact an uniformity as to preserve to the whole the character of fitness . . . the eye is rejoiced to see the object turned and shifted, so as to vary these uniform appearances. Thus the profile of most objects, as well as faces, is rather more pleasing than their full front. Whence it is clear the pleasure does not arise from seeing the exact resemblance which one side bears the other, but from the knowledge that they do so on account of fitness, with design, and for use."*

Alison, likewise, states his conviction that it is to the expression of design that uniformity and regularity owe the impressions of beauty which we connect with these qualities; and proves his assertion by observing that where regularity is the result of chance, and not of design, its appearance conveys very different impressions.†

This connexion of design with the beauty of regular forms is further proved by a circumstance pointed out cursorily by Mr. Home. In referring to the principle of regularity in geometrical figures, he observes that a parallelogram loses its beauty when it constitutes a

* It is probable that Hogarth does not intend to imply by the term *profile*, as is usually meant by it, an exact side view, since he alludes immediately after to the beauty which the countenance acquires "from being turned a little on one side and slightly inclined."—See Hogarth's "Analysis of Beauty," chap. iii. p. 19.

† Alison on Taste, vol. ii. p. 64.

mere approximation towards equality; "for proportion there degenerates into imperfect uniformity, and the figure appears an unsuccessful attempt upon a square."* It is evident that this remark would apply to all objects in which regularity constitutes a mark of design. The least visible departure from regularity in such objects, would cause in us a sensation of dissatisfaction and uneasiness; whereas in those combinations of forms in which the occasional occurrence of regularity appears to be the result of mere chance, we see with perfect indifference, a greater or less degree of approximation to any regular form.

I must next refer to the important influence which Reynolds has attributed to custom, in forming our taste for the beautiful. It will hardly be necessary to state, that the opinion of this eminent and truly philosophical artist, was, that in every species, both in the animal and vegetable kingdoms, beauty was to be found midway between all extremes. "Nature," as he expresses himself, "inclines towards one fixed and determinate form, like various lines terminating in one centre; and as these lines all cross the centre, though only one passes through every other point, so it will be found that perfect beauty is oftener produced by nature than deformity." In a subsequent sentence, Reynolds confounds the beauty which is proper to organized beings with that which is conspicuous in fashions. He here seems to have lost sight of the fact, that in all created beings, and even in

* See Walker's "Analysis of Beauty," p. 76.

things which apply to the uses of man, beauty is inseparable from those conditions which have immediate reference to their destination, and that the principle of custom can hold as long only as it corresponds, in some beings and objects, with the adaptation of means to ends. Reynolds, unfortunately, carries his principle of custom so far, as to make it, as it were, an essential and almost unconditional element of the beautiful; and his doubtless somewhat hasty assertion, "that if all the world would agree that *yes* and *no* should change their meanings, *yes* would deny and *no* would affirm," has not only considerably lessened that share of reliance to which his theory is entitled, but given rise, on the part of Stewart and Burke, to the expression of opposite opinions, calculated to perplex a question, concerning which there are, it appears to me, no strong grounds for dissent, provided the influence exercised by custom or habit be rightly appreciated.

Stewart refutes the doctrine of Reynolds: firstly, upon the ground, that although custom, by which we are to understand the most frequent recurrence of the same form, should determine our preference for one individual over another of the same species, "the question still remains to be answered, On what principle do we pronounce the beauty of one species to be greater than that of another?" And he further elucidates his argument by asking, "Whether, upon the principle of custom, we can pronounce the rose to be more beautiful than the dandelion, the peacock than the stork, and a beautiful woman to be the masterpiece of nature's handi-

work."* But I cannot see that the influence of custom is rejected, even by this argument, provided we consider custom as a powerful auxiliary, and not an essential quality of beauty. Custom is the tuition of nature; it instructs us how to apply the various forms and appearances before us, to the ends and purposes which they have been intended to serve; it teaches us how to appreciate these forms and appearances at their true value, and to ascribe to each of nature's works, the exact degree of perfection and beauty which is consistent with the position marked out for it in the creation.

Coming more directly to the question before us, I must observe that the beauty of the rose, as well as that of the peacock, being, in a great measure, if not principally, dependent on colour, these examples do not exactly come within the limit of an inquiry which regards form. But putting colour aside, we shall, I apprehend, equally find, that we do not discover the whole beauty which belongs to each object, until custom, or the habit of judging and comparing, has made us fully conversant with all its qualities. If we had not, from our youth, been accustomed to associate the habits and character of each living species with its form, it seems very doubtful whether we should be as sensible as we are now, to that kind of beauty which is peculiar to each. In the greyhound, the terrier, the stag, and the horse, we admire the most opposite expressions of form, because, custom having made us conversant with their qualities and habits, we are able fully to appreciate that perfect con-

* See Stewart's "Philosophical Essays," part ii. p. 349.

formity of structure with the purposes required, which, in every species respectively, constitutes the index of beauty; and even when the exact knowledge of their respective habits is wanting, custom, combined with the influence of opinion, has taught us to give our tacit and willing acknowledgment to the perfection of each. It is in this manner that custom greatly assists in making us sensible to those kinds of attraction, seemingly unconnected with purpose, which determine our predilection for certain pet animals; and if, on the other hand, we ascend to that beauty which, in the human countenance, is the expression of supreme intelligence, and of every tender emotion, habit again powerfully assists in that communion of sentiment, without which, many traces of beauty must remain undiscovered, although the prevalence of those sentiments and emotions which are inseparable from the contemplation of human beauty, considerably modifies, in the last case, the influence of habit.

Had Reynolds limited the bold assertion above quoted, to ornamental designs and patterns, which are intended to please the eye, without reference to utility, it might have held out against every objection; for, in such figures as these, regularity is the only principle which remains stable,—the rest is merely conventional: and when the world agrees (that is to say, the world of fashion,) that one design is more beautiful than another, it becomes and remains so until a contrary verdict is pronounced. But this doctrine could not apply to nature at large, unless we could reverse the purposes to which all things have been adapted, and discover, for

instance, in the leg, the conformation required for carrying; in the arm, the requisites for walking; in the ear, those for smelling, &c. I expose, without hesitation, the ridicule to which the unreserved application of this statement of Reynolds would lead; because I feel convinced that it was custom, associated with the principle of adaptation to purpose, that he had chiefly in view throughout his argument on the principle of beauty.

Stewart has, it appears to me, given an unfavourable and incorrect interpretation of the general meaning of Reynolds's text, when he reasons upon custom as of a principle unconnected with any thing else, considering it as a mere repetition of the same thing, or of the same occurrence, a great many times; for this meaning he distinctly implies, when he alludes to the fall of heavy bodies to the earth, as instances of that which is common or customary.* Now this frequent recurrence of the effect of a natural cause, on which Stewart grounds his second objection to Reynolds's theory, has, as I think will be perceived, very little connexion with the greater prevalence, in sensitive beings, of that form which is midway between every extreme, and which we consequently regard as the most customary one. Nor does the principle asserted by Burke, in order to prove that proportion and custom have nothing to do with beauty, appear to me to be better founded. The substance of his assertion is, that deformity is not the opposite to beauty; and that proportion and regularity may prevail,

* See Stewart's "Philosophical Essays," p. 351.

without its being necessary that beauty should follow.* Now, if deformity were not opposed to beauty, we might remove the former, and yet come no nearer to the latter; but all persons will, I think, admit that the removal of a deformity produces, in every instance, an approach to beauty, and that its presence invariably causes a departure from it. Indeed, it appears evident, that deformity is nothing else than the excess of those minor defects and blemishes, the existence of which suffices of itself to destroy beauty of form: and the more our eye is conversant with those forms, which, in every species, present least of these defects, and come nearest to perfection, the more sensible we are to the characteristic beauty of each.

Mr. Harding, alluding to the doctrine propounded by Père Buffier, and supported by Reynolds, that beauty is to be found in the most customary form, or that which is most removed from every extreme, observes, that a theory which designates beauty as something, neither one thing nor another, shews that the writer who propounded it had either a very vague idea of beauty, or if his ideas were distinct, that he could not express them clearly.† Doubtless this task of discovering the true and perfect amid all the deviations and extremes which nature presents, is a difficult one; nor would it be possible, by any mechanical or artificial means, thus to separate the pure and the beautiful from the misshapen and the defective: but if the eye

* See Burke on the "Sublime and Beautiful," part iii. sec. 5.

† Harding's "Principles and Practice of Art," p. 41.

of taste be resorted to, instead of calculation and measurement, is it not the only method which we can employ with any thing like success? It is in the human countenance that we find materialized, as it were, the most perfect expression of that beauty which pertains to our species; and, incomplete as may be each single model, would not a selection and union of the most perfect, bring us nearer to ideal perfection, than any artificial means that can be suggested? Thus, though somewhat antiquated, I see no method which appears more available in practice, and deserving our reliance, than that which Winckelmann attributed to the Greek artists, of selecting beauty amid the nearest approaches to it discoverable in various individuals, in order to form one ideal whole more beautiful than any model.*

Burke, Stewart, Alison, and Winckelmann, have all argued to prove that this perfection of form is not attainable by any rules of proportion, or by any mathematical deductions. Indeed, the term "ideal beauty"

* Mons. Quatremère de Quincy, in his argument on this subject, observes, "that ideal perfection is best attained by a general study of the aim of nature in her various creatures, and by the observation of the means employed by her to fulfil the various functions appropriated to each part in every individual." Upon the whole, M. de Quincy seems to be adverse to the opinion expressed by most authors, that ideal beauty is a selection of the perfections existing in many individuals, united together for the completion of a single figure. He regards these views as embracing too much of a principle of material aggregation, which he affirms to be a thing impracticable; and maintains that the system of selecting beauty in the multitude, and of realizing an ideal subject, can only be available in the general observation of nature, and by a process of internal judgment, which he allows to be a faculty possessed by a very limited few. See his "*Essai sur l'Idéal dans ses applications pratiques aux œuvres de l'imitation propre des arts du dessin.*" Paris, 1837. Page 65, and subsequent pages.

implies of itself something imaginary, and shews that the first opinions that were entertained upon this subject were conformable to this sense of the term; and it becomes a matter of surprise that so much pains should have been bestowed in discovering a key to a problem, concerning which Winckelmann observed, nearly a hundred years ago, "that if our ideas of beauty were to partake of the evidence of geometrical demonstrations, the judgment respecting it would be unanimous, and that there would be scarcely any men so ill-bred, or so ill-organized, as to cherish in its stead an imaginary phantom."* Now this is the axis on which the whole force of the question revolves. We cannot expect that the mist which seems to envelope this proposition will be dispelled, unless we trace a distinction between perfect beauty, as an object of practicable attainment, and its ideal existence, as a mark stimulating to noble exertion in the contest of the arts. It is as necessary that perfect beauty should not be attainable by any positive and definite means, as it is that we should have within us the sentiment of an ideal beauty. It is the sentiment of ideal beauty and perfection only, which causes us to aspire to something higher and more perfect than that which lies open to the observation of every one in the works of nature. It is this feeling alone which can raise the art above every circumstance of life, and give it a high intellectual position. That this sentiment of the beauti-

* See Winckelmann's "*Histoire de l'Art.*" Vol. i. p. 243.

The same author adds, "Beauty is a secret of nature: we behold it, and experience its effects; but it is not easy to form a distinct and clear idea of its nature. Its essence is still to be discovered," &c.

ful is a conception not to be realized, seems proved by the circumstance that no one has hitherto given, or could possibly give, such substance to it as to win, in favour of his work, the unanimous approbation of taste. That it has but a local and transitory dominion, seems likewise to be proved by the circumstance that the nations or races of men, each of which founds its primary ideas of beauty according to a type of its own, are both circumscribed in their extent and influence, and limited as to the period of their duration. Nevertheless, it is necessary, in order that art may have a distinct object in view, that ideal beauty should have all the importance and consistency of an existing fact, and of a demonstrable truth. It is likewise necessary, that in the eye of art it should have the permanence of a law of nature; for that perfection in art which we esteem to be the highest and soundest, is that which maintains its pre-eminence during the greatest lapse of time. There are no limits to the period during which the creations of art may continue to be held as models of perfection. As realized by Greek sculpture, they have maintained their pre-eminence through successive races of men, and imposed their supremacy to the decisions of the remotest periods. An aim not less elevated than this, should art—historical art, at least—have in view in all times and countries, even should it be without hope of achieving so high a design. An aim short of this, is nothing more than that which constitutes the easy prize of all mannerists, and of those painters who work for time and circumstance.

. I will offer elsewhere, some further and more special remarks on this point, without endeavouring to subvert or influence such received opinions as are the result of long experience and reflection. We will now proceed to the consideration of such principles as are, to a greater or less extent, *essential elements* in emotions of the beautiful, and subsequently to the examination of those principles which are *conducive* to it in the works of nature, and which tend to promote it in the productions of art. These principles, conducive to perfection in works of art as abstract causes, may be, at the same time, some of them, at least, more or less included in its practical mechanism, for there is no precise point at which the truths of theory cease to afford practical rules. Generally speaking, however, I have reserved such observations as have a direct reference to painting for the second part of the work, availing myself, in the arrangement of the subjects, of the advantages of system, to such an extent as perspicuity might require, without imposing any restraint on the imagination of the reader.

ON THE ELEMENTARY PRINCIPLES WHICH CONSTITUTE THE BEAUTIFUL.

COMPRISING

THE SUBLIME. THE PICTURESQUE.
THE GROTESQUE. THE GRACEFUL.
THE ELEGANT.

INTRODUCTORY REMARKS.

In offering a few remarks on the principles which are connected with the perception of the beautiful in its various aspects, or which are comprehended in a general and tasteful survey of nature, I shall allude but briefly to the opinions entertained by some authors, respecting the cause of our emotions under various circumstances, and chiefly apply myself to point out the immediate and appreciable influences which most effectually concur in promoting a cheerful perception of every kind of beauty, as well as some of those points of difference and agreement in writers, the knowledge of which is necessary, in order that taste may be enabled to find out at once its object through a bewildering maze of apparently conflicting systems and opinions.

Alison, than whom few writers have entered into this subject with more diligence and research, maintains, with much seeming assurance, the necessity of a predisposed state of the mind, in order that beautiful or sublime objects may affect it with those sensations

which expand and gladden it; and though he may appear to ascribe too much to the influence of reasoning and to the involuntary exercise of the imagination in relation to the objects beheld, nevertheless, the influence of previous impressions is in many cases so great, and the predisposition to pleasure is so much increased by a return of the same moods and throbbings to which the mind has been already once alive, that one cannot be surprised if Alison has extended the effects of the imagination, and of trains of reasoning, beyond the usual limits of their influence with most persons. Whether or not it be necessary that the imagination be actively engaged at the time that the mind receives impressions of delight from beautiful and extraordinary objects, it cannot be doubted that a sensitive and lively imagination partakes the most of these pleasures, and that an education calculated to awaken the mind to the grandeur of natural objects, would have, in this respect, a decided superiority over one in which the cultivation of objects of taste has no share. Any one must, I think, be aware of this, who observes the indifference with which peasants and persons of low pursuits behold the wonders of nature. We may further conclude, that a person whose imagination has been busied and entertained beforehand concerning any particular objects of beauty, will derive, even though his anticipations may not be fully realized, an increased amount of pleasure from the actual contemplation of them.

To these remarks, bearing on the preparatory condition of the mind, it may be added, that delight almost

invariably results from the revival of cherished impressions of the past. Thus we derive, generally speaking, great pleasure from revisiting towns, countries, and places, where we have previously enjoyed ourselves; we indulge over and over again in a walk become a favourite one by acquaintance, and hail, with increased delight, the return of a season of which we have tasted the pleasures. This may be an important fact in our moral constitution, since it is by the revival of impressions already awakened, that our habits are, in a great measure, governed. Custom, by degrees, makes us take equally a delight in those things which our judgment commends or disapproves; and, in the like manner, with respect to objects of taste, it is chiefly to the habit of seeing and of hearing commended, certain modes of expressing nature, that is to say, certain styles and manners of execution, that our judgment becomes refined or perverted.

THE SUBLIME.

I will now allude to some of the opinions which I think have been erroneously entertained respecting the sublime. Stewart, adopting principles very different to those which have been generally entertained on this subject, discovers the chief source of the sublime in those ideas which are connected with elevation. This is, doubtless, a powerful principle, having a direct and immediate action in producing emotions of the sublime; but I doubt whether Stewart has not extended its

prevailing influence to circumstances in which other sources of emotion so strongly prevail, as almost entirely to obliterate the ideas of sublimity which result from elevation.

Alluding, for instance, to the epithet *mountain billows*, as connected with one of the chief sources of the sublime in the aspect of the ocean, namely, the height of its waves, or to the influence which the custom of navigators of looking up to the stars in their astronomical observations, has in extending still further the prevalence of this emotion, the author forsakes those primitive elements of the sublime, which the immensity of the ocean presents, modified in a hundred forms by its storms and dangers, to adhere to secondary and more remote causes. Principles like these detract from those which are most immediate and powerful in their influence.

The author, alluding, in page 419, to the concavity over our heads, of which the summit or cope is always exactly coincident with our shifting zenith, says, "It is observable that its sublime effect is much increased by the mathematical regularity of its form; suggesting the image of a vast Rotunda, having its centre everywhere, and its circumference nowhere;—a circumstance which forces irresistibly on the mind, the idea of something analogous to architectural design, carried into execution by Omnipotence itself. . . . As the natural bias of the imagination, besides, is to conceive the firmament to be something *solid*, in which the sun, moon, and stars, are mechanically fixed, a sentiment of wonder at the unknown means by which the law of

gravity is in this instance counteracted, comes to be superadded to the emotion excited by the former combination of circumstances."

By converting the boundless space of the firmament, as it were, into a close vault, by assigning to it form and substance, instead of endless penetrability, the author allows to escape those impressions of the sublime which are allied to infinity and eternity, to secure the comparatively petty causes of astonishment, which may be the result of a skilful mechanical artifice. The suspension of a compact azure vault over our heads, inlaid, as it were, with the stars and planets, could give rise to nothing more than that kind of surprise with which, as the author observes, "we behold, in looking up to the vaulted roof of a Gothic cathedral, the triumph of human art, in rendering the law of gravitation subservient to the suspension of its own ordinary effects."*

Stewart, alluding to the circumstance that horizontal extension, as well as great altitude, is an element of the sublime, observes, "Upon the slightest reflection, however, it must appear obvious, that this extension of the meaning of sublimity, arises entirely from the natural association between elevated position and a commanding prospect of the earth's surface in all directions. As the most palpable *measure* of elevation is the extent of view which it affords, so, on the other hand, an enlarged horizon recalls impressions connected with great elevation. The plain of Yorkshire, and

* See Stewart's "Philosophical Essays." On the Sublime: p. 411.

perhaps still in a greater degree, Salisbury Plain, produces an emotion approaching to sublimity, in the mind of a Scotchman, the first time he sees it; an emotion, I am persuaded, very different from what would be experienced, on the same occasion, by a Fleming or a Dutchman; and this, abstracting altogether from the charm of novelty."* Here, as in the preceding remarks, Stewart has again generalized too much the influence of elevation, his favourite principle of the sublime. The charm of novelty, which so remarkable a feature of nature as a boundless plain, would afford to an inhabitant of the mountains, far from having no influence in inspiring ideas of the sublime, would be a fertile cause of astonishment and wonder, impressions which, united to ideas of immensity, would be a most productive source of sublime emotion; and this, I should say, much more from the connexion which a boundless plain has with infinity itself, than from the relation it bears to perpendicular height.

Stewart, however, entertained, I think, views perfectly just, in establishing an intimate connexion between elevation and power, thus attributing to it one of the most important elements of the sublime; and this truth he proves, by shewing the advantage which an elevated position affords, in warlike aggression and defence.

In connecting ideas of sublimity with energy of character, Stewart adopts the opinions entertained by Payne Knight, and observes that "the *direction* in which the

* Stewart, p. 415.

energies of the human mind are conceived to be exerted, will of course be in opposition to that of the *powers* to which it is subjected, of the *dangers* which hang over it, or of the *obstacles* which it has to surmount in rising to distinction. Hence the metaphorical expressions of an *unbending spirit*, of *bearing up* against the pressure of misfortune, of an *aspiring or towering ambition*, and innumerable others."* One meets, here, with a remarkable concurrence in the views of authors, very remote in other respects, concerning a question which has frequently been marked by ridicule on account of the dissensions to which it has given rise. At the same time that the opinions which are entertained by Mr. Payne Knight, respecting the connexion of the sublime with the display of mental energy, correspond, in almost every particular, with those which Stewart so fondly dwells upon, we might, apparently, trace to the Greek author Longinus, the true source of these opinions, who, according to Mr. Payne Knight's quotation, says, that the effect of the sublime is "to lift up the soul; to exalt it into ecstasy; so that, participating, as it were, of the splendours of the divinity, it becomes filled with joy and exultation, as if it had itself conceived the lofty sentiments which it has heard."†

Stewart points out (p. 433) the relation between this energy or mental elevation, and the upward looks of man, "*os sublime*;" but I think he does not sufficiently develope his idea, the erect position of the head and bust being, in fact, the expression itself of the energy,

* Stewart, p. 414. † See Payne Knight, Part III. chap. i. par. 17.

firmness, and elevation, of a mind abounding with sublime emotion, whereas the opposite bending attitude, generally marks despondency, discouragement, or still meaner propensities. The sublimity of the human stature, therefore, is not in the erect position itself, any more than it would be in that of an upright pole, or monument of any kind, but in the mental energy of which it is the symbol; and this, probably, owing to the mechanical effort made to raise the head and body, either in conceiving elevated schemes, or in carrying out noble actions.

Proceeding from a partial fact to a more general one, we may ascribe, with Stewart, the fundamental principle of that sublimity which is connected with elevation, chiefly to the effort and energy required to overcome a force, namely that of gravity, which, though purely mechanical to our external senses, becomes thus, indirectly connected with our moral existence; an exercise of energy, which, in all cases, is attended with great and admirable results. As a further cause of this connexion between elevation and sublimity, on which Stewart so much dwells, may be added, that it is chiefly in looking upwards that we become impressed with infinity and mystery;—boundless extension when the vapoury film of clouds is withdrawn; and when the zone of mist is spread above us, that kind of uncertainty and doubt which is connected with almost all the phenomena of the atmosphere. The interior of the earth, which we look down upon, it may be said, affords equally striking examples of uncertainty and mystery. But it is the earth's surface with its distinct productions, and

not its recondite recesses, which first falls upon the eye, and which we habitually contrast with the vague and undefinable wonders of the regions above us. Alison, in ascribing impressions of the sublime to warlike instruments of various kinds, falls, I think, into the same kind of error as Burke does, when he affirms that this emotion is raised at the aspect of the meanest animals which are injurious or dangerous. Both extend the principle of the sublime to objects which possess, if I may so express myself, but so small a particle of it, that in cases in which these objects are most usually introduced, either into paintings or descriptions, other impressions prevail, and whatever there may be of the sublime, is forgotten. If we see a raised dagger, or perceive a levelled gun or pistol, we may feel anxiety for the person whose life seems endangered;—the presence of snakes or of scorpions may, in a similar manner, awaken our interest, sympathy, or alarm; but of the sublime, I see here very little, unless there be something great or noble connected with the incident, of which these instruments of harm, of whatever nature they may be, form a part. For instance, the dagger may become a sublime object in connexion with the death of Julius Cæsar; and the snake, with that of Cleopatra; but attach these instruments of death to some incident of common life, and they lose, at once, all their sublimity. A wolf, a dog, or a bear, may be rendered sublime objects, if they be made to have some share in the formation of a sublime subject; as a stream, a tree, or even a flower, may be made to form a part of a sublime composition: but in either case, the scene which comprehends these objects

is not sublime because they are found in it, but because it possesses other features which are more essentially sublime. Remove any of these creatures or objects:—the composition may perhaps suffer much in its pleasing effect, but very little in its sublimity. An object truly sublime is one which itself imparts greatness to the subject of which it forms a part, and which, in any composition, extends and magnifies that which it may already possess from other causes.

In opposition to the opinions entertained by Burke, concerning the emotions of grief, fear, and terror, Payne Knight adduces, from the writings of Longinus, conclusions which contemporary critics have overlooked. According to these tenets, grief and fear are not in themselves characterized by sublimity, but, inasmuch as they tend to humility and subjection, they are rather the reverse; and it is only by its association with the exercise of energy and power, that the impression of danger partakes of the sublime. Where fear so far predominates, as to extinguish those impressions of energy and power which are immediately associated with the cause of danger, the sublimity which is connected with it, disappears, and gives place to opposite emotions. The storm, according to Payne Knight, has sublimity to him, only, who has sufficient strength of mind to dispel all apprehension of danger, and who, consequently, enjoys the calm necessary for contemplation.*

Setting aside those differences of opinion to which

* See Payne Knight, part iii. chap. 1, par. 55.

I have partly alluded, and which appear to result chiefly from the too great influence which has been ascribed to trivial and partial causes, it will be found that there is, in general, more consistency than might be expected in the opinions entertained, even by different authors, on the nature of the sublime. This principle, indeed, embraces several conditions of events or matter, so apparently different from each other, that unless all authors had fixed upon the same, or had alluded to every one of them, their views on this subject must have differed considerably. We cannot admit in the Sublime, as we do in the Beautiful, a principle having a like tendency wherever it manifests itself. The latter, we discover to be that which is most pleasing to sight in every object, and the most pleasing of all, in the object which is the most susceptible of imparting pleasure. But the impressions of the sublime, present themselves considerably modified, in the various appearances and incidents of nature with which they may be connected; and the theories of the authors to whom I allude, are not more opposed to each other, than might be expected to result from this apparent diversity in the nature of the sublime itself.

In Blair, we find as its chief characteristics, impressions of *awe* and *terror*, *solemnity* and *vastness*. It expresses the highest degree of grandeur.

Burke, who has been more unfortunate in his examples, than in the principles which he asserts, likewise admits awe and terror, as fundamental causes of the sublime, adding, as secondary agents, *obscurity*, *power*, *vastness*, *infinity*, and *magnificence*.

Stewart attributes to *elevation*, the chief cause of the sublime; and associates with this principle, the influence of the laws of gravitation, as well as the opinions entertained, at all periods, respecting the celestial abode of the Divinity.

In Alison, we find occurring, the same expressions of *danger*, *awe*, *solemnity*, *magnitude*, *elevation*, *extent*, *magnificence*, and *power*.

According to Payne Knight, *mental energy*, from the feelings of sympathy which it excites, seems to be a ruling source of the sublime.

The author of "Modern Painters" deviates very little from the theory of Burke, respecting the sublimity which is connected with danger and death, and concurs with Blair in ascribing the highest degree of sublimity to greatness in the noblest objects.

Mr. Inglis, in an elegant description of a romantic scene in Norway, gives his testimony to the influence of impressions of power, in constituting the sublime.

In all these various definitions of different individuals, we may trace some quality which has reference to wonder, reverence, or admiration. Their connexion is, I think, sufficiently marked, to show that unprejudiced opinion is nearly unanimous as to the general nature of this emotion. As before observed, however, the instances to which the sublime is applicable, differ widely. The dignity and profound sagacity, which may be its ensign in the head of a Jupiter, seem to bear but a faint analogy to the terrors of a thunder-storm; or the expression of fortitude and virtue in the human features, to the mysterious gloom of a forest, or the starry vault

of heaven: yet, if we are able to trace the various impressions connected with these objects, to one same source, we ought, I think, to feel satisfied, that they are allied to one another. Do not the dignity and foresight which the Greek artist has graven on the head of his god, and the terrors of the thunderstorm, bespeak alike, power? And is not the same principle alike predominant, in the mysterious grandeur of the scenery of nature, and in the serenity of innocence itself? Greatness, magnificence, elevation, duration, extent, and danger, though they may differ, and be, in some measure, opposed to each other, are all referable to power. Power, therefore, more than any other attribute, becomes the foundation of all emotions of the sublime; and power, or rather, omnipotence [*allmacht*], may be regarded as the key to all the other expressions of the sublime included in our phraseology.

THE PICTURESQUE.

With reference to the picturesque;—this term, according to Gilpin, is derived, in the first place, from the suitableness of the objects characterized by it, for pictures; and, in the second place, from a degree of roughness, ruggedness, shaggedness, and other similar qualities, possessed by them. But he erroneously ascribes the suitableness of picturesque objects to the purposes of the artist, to this character of roughness and

irregularity; and draws a mistaken inference, that the smoother objects become commendable to the painter, only because they possess a certain degree of irregularity of surface, or modification of colour. It is true, that in the landscape, the irregularity and apparent roughness of a great many objects, greatly contributes to that variety which renders them so well suited to the composition of a picture. Rocks, mountains, and ruins, are, in general, marked by a great degree of irregularity, and are, at the same time, eminently picturesque objects. But it does not follow, that smooth objects must be excluded from the picture unless we can discover some means of making them rough. By endeavouring to prove that rough and smooth objects are equally right in their place, I should be encroaching on the subject of *variety;* and shall here only allude to some of the cases in which a certain degree of roughness, or of diversity of colour in the surface of objects, adds, according to Gilpin's peculiar views, to their claims to the picturesque, or to the honour of becoming part of a picture.

Alluding, in terms of admiration, to the beauty of the human form, he adds, that "the more its smooth surface is ruffled, the more picturesque it appears; and that when it is agitated by passion, and swoln by strong emotion, the whole frame is shown to the most advantage."* How completely does the author here forget the true causes of the delight which the image of the human figure is capable of exciting, to put forward in

* See Gilpin's "Essay on Picturesque Beauty," p. 12.

their stead, a principle, namely, the picturesque, which must be entirely lost in the case alluded to, and which can only predominate in a class of objects of an opposite order!

The cart-horse is preferred, for the harder lines of his form, the roughness of his coat, &c., to the pampered horse of the livery stable; yet, owing to the diversity of lines which mark the coat of the latter, he is not considered by Gilpin so unpicturesque, as to deserve being banished from the picture altogether.* Does he suppose that the swiftness apparent in his limbs, the fire of his eye, and the courage, tempered by mildness, expressed in his countenance, are nothing to the point? In short, could he not discover in the thoroughbred Arab, any qualities, besides the spots and roughness of his coat, to cause admiration, or welcome his presence in a production of art?

The same author ascribes, in a great measure, the picturesqueness of a lake, to the diversity of shades occasioned by the objects reflected there, "thus causing it, though in fact smooth, to appear rough or uneven."† As we neither ruffle the surface of a glassy lake, nor the polished coats of animals, to render them interesting and valuable objects in the artist's studio, we may, I presume, be sufficiently satisfied, that they have some qualities, besides these variations of surface, which render them suitable objects for a painting.

Though Gilpin does not ascribe a distinct character to the beautiful, he follows the footsteps of Burke, in

* See "Essay on Picturesque Beauty," pp. 14-22.

† Ibid. p. 22.

rendering smoothness one of its chief constituents, whether the objects to which this quality applies, be large or small. This establishes a marked distinction between it and the picturesque, which, in the opinion of this author, is only compatible, as above stated, with roughness and ruggedness.

Price takes up the question nearly on the same ground as Gilpin, and developes his ideas, by ascribing the cause of the picturesque, to the effects of time, in fact, to the wear and tear of nature. But finding that the picturesque has features which are not always met with in beautiful objects, he seems to fancy, that the beautiful expresses a distinct emotion, and that, as well as the picturesque, it is a generic principle. It does not occur to him, that there are other terms, such as "elegant," "graceful," "delicate," the signification of which, is more directly opposed to that of picturesque, and which, therefore, are more appropriately used as distinctive epithets.*

Dugald Stewart discovers the mistake of Mr. Price, resulting from the partial view entertained by him of the term "Beautiful"; and observes, "that he was necessarily led to this conclusion, by the admission, at his first outset, of Mr. Burke's peculiar tenets, (respecting the beauty of smooth objects,) as so many incontrovertible axioms." Stewart ascribes to Beauty, its usual signification of degree rather than kind, and to the picturesque, a

* Dugald Stewart, alluding to the theory of Price, observes that "he ought to have extended the application of the word 'Beauty' to whatever qualities in natural objects affect the mind with agreeable emotions through the medium of sight."—*Philosophical Essays*, third edition, p. 303.

modifying or embellishing principle, which may even enhance the former.* By remarking, however, subsequently, that an object may be beautiful without being picturesque, or picturesque without being beautiful, Stewart seems to contradict the principles upon which he allows that a picturesque object so essentially contributes to the beauty of a subject.

In Stewart's observations on the picturesqueness of the ass,† we find a remarkable instance of the errors which arise from seeking out causes from afar, when they are to be found immediately at hand. He acknowledges, with Gilpin and Price, the picturesqueness of the ass, and of other humble animals, to result from their rough and shagged outline; yet he mentions, as a great omission on the part of these authors, that kind of picturesque beauty which he deems to be resulting, in the ass, from association with the passages of scripture in which mention is made of this animal, as well as with the fables of Æsop, and the classical language of other ancient poets. This is indeed seeking a long way off, that kind of pictorial merit which we discover in the humble beast of burden standing by the mill, or tethered beside the green load of the woodman.‡ I do not, how-

* Alluding to Price, Stewart observes, "Instead of making the picturesque a distinct genus from the beautiful, it would certainly have been more logical to say, that the former is, in some cases, an important element in the constitution of the latter. For my own part, I cannot conceive any principle whatever, on which we can reasonably refuse a place among the *elements* or *constituents* of beauty, to a class of qualities, which are acknowledged, on all hands, to render what was formerly beautiful, more beautiful still."—P. 310.

† P. 319.

‡ It appears that the late Rev. Sidney Smith thought so little of the

ever, see, that this seeking after remote causes by a distinguished author, in order to throw further light on an exhausted subject, should seriously weaken the conclusion, to which such strong evidence is borne by the unanimity of most writers, that it is chiefly to ruggedness, roughness, and other marks of rusticity, that impressions of the picturesque are owing. We might in vain seek far and wide, amongst the arguments of various writers, to find a denial of this point. But the picturesque, like all other qualities of objects which please and delight us, being spoken of with a certain degree of enthusiasm, loses, generally, when used descriptively, and in the warmth of admiration, those characteristic distinctions, according to which, we are disposed to give it a meaning apart from all those which imply other conditions of beauty. Its signification becomes the more generalized, as we behold, or describe, with increasing rapture, the objects or scenes which are depicted by the term; and it is, there is no doubt, by the extension which it has in this manner acquired, that it has been employed to signify, as Gilpin affirms, all those beauties which are peculiarly adapted for the formation of a picture.

With reference to the sentiment of the picturesque, Humboldt's scientific researches respecting the progressive developement of a taste for natural scenery, from the remotest periods of history to the present time, as enounced in the second volume of his "Kosmos," have given considerable interest to the question, how far

merits of the ass, as a beautiful animal, that, with the intention, doubtless, of improving upon nature, he deemed it advisable to have stags' horns fastened to the heads of those which fed in his grounds.

landscape painting was cultivated by the ancient Greeks and Romans, and to what extent, a feeling for the beauties of nature in general, was entertained. The following passage bears most directly on this subject:—"In Grecian and Roman antiquity, which we call classical from the peculiar direction in the minds of the people, landscape painting was as little an independent object of art, as was the poetical representation of the country. Both were merely treated as something secondary. Subordinate to other objects, landscape painting served only, for a long time, as the background of historical compositions, or as an accidental ornament of pictures on the walls. In a similar way, the epic poet, by an artistic description of the landscape—I might almost repeat, of the background, before which the actors in the scene are moving, —represents the locality of some pictorial event."* These doubtless original suggestions of Alexander von Humboldt, for which the distinction of the name which is connected with them, as well as the general and popular nature of the subjects treated, claim a large share of attention, afford a remarkable instance of the increased importance which all observations and discoveries derive, from any propitiating circumstances which attend their announcement. The remarks, equally free from ambiguity, expressed, in the last century, by the Rev. Mr. Twining, respecting the indifference of the ancients for the picturesque beauties of nature, as shown both in their paintings and poetry, appear to have fallen into oblivion, and not to have met the eye of more recent commentators.

* "Kosmos," Pritchard's translation, vol. ii. p. 74.

I give the following selection of Mr. Twining's remarks.* "... For it appears, I think, from all that has been transmitted to us of the history of that art among the ancients, that *landscape painting* either did not exist, or at least was very little cultivated or regarded, among the Greeks. In Pliny's account of Grecian artists, we find no landscape painter mentioned, nor anything like a landscape described in his catalogue of their principal works. The first and the only landscapes he mentions, are those said to be painted in fresco by one Ludius, in the time of Augustus ... He seems to have been the Claude Lorraine of ancient painting. But that *landscape* was not, even in Pliny's time, a common and established branch of painting, may perhaps be presumed from the single circumstance of its not having acquired a name." The author here alludes to its being called by Pliny, periphrastically, "an *agreeable kind* of painting, or subject, '*amœnissimam picturam*,'"—and continues, further, "The Greek poets did not *describe* the scenery of nature in a picturesque manner, because they were not accustomed to *see* it with a painter's eye. Undoubtedly they were not blind to all the beauties of such scenes, but those beauties were not heightened to them, as they are to us, by comparison with painting—with those models of *improved* and *selected* nature, which it is the business of the landscape painter to exhibit. They had no Thomsons, because they had no Claudes. Indeed the influence of painting, in this

* See Dissertation First, "On Poetry considered as an Imitative Art," prefixed to the translation of Aristotle's Treatise on Poetry, by the Rev. Thomas Twining. Published in 1789, pp. 34–36.

respect, not only on poetry, but on the *general taste* for the visible beauties of rural nature, seems obvious and indisputable. . . . Such beauty does imitation reflect back on the object imitated." In notes which are subjoined to the preceding passages, further proofs are adduced of the insensibility of the ancients to landscape beauty. Mr. Twining alludes to the deficiency of any single term, either in the Greek or Roman language, appropriated to express exactly what *we* mean by a *prospect*. He says that Pliny, in his Epistles, book v. epistle 6, and in the 17th of 2nd book, "has frequent occasion for such a term, but is obliged to have recourse to circumlocution." After a quotation from Winckelmann, who is referred to as one of the safest authorities in ancient art, he observes, that "Men and manners were the only objects which the Greeks seem to have thought worth regarding, either in painting or poetry."

THE GROTESQUE.

In most respects, the grotesque differs very little from the picturesque; and most of the foregoing remarks will, therefore, apply equally to it. In some respects, however, it does deviate from, or at least greatly exceeds, the picturesque, in the expression of similar characters or ideas. Dugald Stewart ascribes the origin of the term, to certain figures and devices which are painted in fresco, on the walls of a subter-

ranean grotto at Rome, alluding, probably, to the fantastic figures and arabesques in the Columbarium of the Villa Doria Pamfili, of which the character exactly corresponds with our present idea of the grotesque; although it seems more probable, that the term grotesque is due, rather, to a certain resemblance between a wild and capricious style of painting, and those whimsical freaks of nature which the artificial grotto suggests.

There is something more exaggerated, more fantastical, and more allied to the caricature, in this style, than there is in any production having the character which is usually designated by the term Picturesque. It seems to admit, in some degree, of the supernatural, of the magic, and fiendish; since the representation of fauns, satyrs, and witches, is particularly calculated for carrying out ideas and impressions decidedly tinged with the grotesque. This peculiarity of the grotesque, proves that there is a *principle* in imaginative art, capable of affording considerable interest and delight, which has not, I believe, been hitherto alluded to. It acts strongly on the imagination, and very little on the tender passions; and, probably for this reason, it has not won the exclusive homage of any style of art. Its most successful and appropriate arena is the stage. However, the style of painting which is designated as the grotesque, involves a large share of it, although it cannot be exactly termed its representative.

THE GRACEFUL.

I have already alluded to the errors which Alison has fallen into, in attributing to grace, a character at variance with the usual and popular opinions entertained concerning it; but, in as far as he establishes a connexion between impressions of gracefulness, and those curved and winding forms which are the result of motion, his views appear to be substantially correct. It is, in fact, one of the characteristics of motion, to produce sinuous lines; whereas, its cessation, or abrupt interruption, produces a sudden break or disturbance of the flowing line, and thus becomes the source of the angular form.* Whether, as Alison affirms, the grace of motion is increased by the impressions, that the past, the present, and the future, appear linked together in fugitive action, is, perhaps, less evident, although there is, doubtless, a peculiar charm in the motion of living objects.

Alison further alludes to freedom and ease in motion, as being necessary conditions of the graceful. With respect to freedom, it must, doubtless, have, here, a relative signification, as a straight line would result from motion deprived of all restraint. Motion may appear perfectly free, in living creatures, because it is considered with reference to the act of volition which is its immediate cause. Restraint, in this case, can only be the

* See Alison's "Essays on Taste," vol. i. p. 334; vol. ii. p. 210.

result of some external force, which prevents the limb from obeying the will; and although the muscles are compelled to move in a certain manner, and with certain restrictions, necessary to the purposes of the animal when in action, yet, provided there be no hindrance or compulsion from without, the motions of this living being, are considered to be perfectly free. But the expression, "perfect freedom," would not apply equally well, to the organic creation without life. A tree, or a plant, may, indeed, appear perfectly free in its growth, when not hampered by other trees and plants, when nothing leans against it, or bears it down to the ground; but if the natural growth of trees, that is to say, their tendency to rise upwards, were to remain perfectly unchecked and uninfluenced by external causes, it is probable that the vegetable kingdom would present much less than it does, those curved forms which are so agreeable to the eye. The wind, the weight of the fruit and blossoms, the rain, and even the dew, are causes which, with many others, vary, in a thousand ways, the curves and twistings which are peculiar to plants. It is not, therefore, the entire absence of external force, but the removal of all violent exercise of it, that is required, in order that the kind of gracefulness which is the result of motion, should occur. Few forms are more elegant than those which we admire in a single jet of water under the influence of the wind, or in the curling of smoke agitated by a light breeze; a kind of graceful motion which, in both cases, is the result of a force which controls and modifies the first impulse. Even in objects of art, the most graceful forms appear to be parabolic curves, which correspond with

those, which, in the laws of nature, result from two forces acting upon each other in different, though not in opposite, directions.

In jars, vases, and ornaments, the parabola, the hyperbola, and the helix, are, in general, preferred to those forms, which, being composed of the sphere, have but one focus. All men of taste seem to agree, that there is something exceedingly beautiful in the gradual, but progressive, deviation of any line from its primitive direction. Square, cylindrical, and globular forms, are more capacious, and therefore more useful, than those which have a narrow stem or base, but which, gradually and progressively expanding, form a widened orifice. Can we, upon this principle, admit fitness to purpose to be an element of the graceful, as it is, frequently, of the beautiful? Does it not seem, rather, that in these delicate and slender forms, in which grace stands predominant, use becomes rather the apology, than the end? and that, in attaining the graceful, it is the imagination that we chiefly consult,—that light and delicate fancy, which the reminding, too directly, of the wants and purposes of life, would alarm?

If we might trace the grace of inert form, to a more direct influence, than that which is exercised by motion on flexible and elastic bodies, it would be, to the quality of lightness. A figure is light, when it appears to require but a slight effort to raise itself above the surface of the heavy earth; as a vase, or jar, appears light, when, having great elevation and little bulk, it seems to rest, with little weight, upon its support, and carries the imagination pleasingly upwards. This principle of grace,

is very different to that tottering insecurity, which Alison ascribes to the tripod, and other articles of furniture, which require so much caution in handling them. The object is graceful, not because the smallness of its base renders it insecure, but because its very lightness is proved by the smallness of the space required for the foot to rest upon, and which would cause the overthrow of a heavy or ill-proportioned vessel. This kind of grace, derived from lightness, applies, therefore, more particularly to upright objects; for those which are reclining, whether they be slender or massive, require no lightness, dexterity, or art, to keep them in their position. But a reclining figure, I mean a figure from the life, maintains, in a great measure, that lightness which characterizes it in an upright and moving attitude. The ideas of lightness and grace, become, in this case, associated with those forms which are best adapted to the manifestation of these qualities; and when we see the figure in a recumbent, and even sleeping attitude, we still connect, without any effort of the imagination, the form before us, with the means possessed by it for light and graceful action.

It may be remarked, that the graceful is not obtained by being made the end or aim of any particular form or attitude. It should, on the contrary, be the natural consequence of a different aim or purpose. For instance, a figure standing on tiptoe, with its arms raised, would appear any thing but graceful, if this kind of beauty were to be made the aim of that particular position; whereas, suppose the same figure to be gently raised to gather an apple, and it will become distinguished, (form

BRANCH
OFFICE

MADONNA DELLA SCODELLA.

By Coreggio.

IN THE ACCADEMIA OF PARMA.

and attitude being tastefully combined,) by a high degree of grace and elegance. In the same manner, a figure in motion becomes graceful, not when the limbs appear to be put forward, or extended, with the object of obtaining grace, but when grace appears to be the unpremeditated, and almost unintentional, consequence of the lively action which the figure is called upon to exercise. In Correggio's painting of the Flight into Egypt, called the Madonna della Scodella, now in the gallery of Parma, this principle is beautifully modified. The infant Christ stretches out his hand to receive the dates offered by Joseph; but all his thoughts and affections seem to be concentrated in his mother, on whom he is reclining. Thus, the artist, by an ingenious and most tasteful arrangement, has availed himself of a mere accessory cause, for the developement of the most graceful form and attitude. The accompanying plate can give but a faint idea of the exquisite taste which has prevailed in the arrangement of the group, in the original. In every case, the graceful results most, as it appears to be less intentional, but seems to be the necessary consequence of purposes remote and different.

How far this principle may extend to inanimate nature, is not so evident. Whether, for instance, we connect greater ideas of elegance with the tall narrow lighthouse, because it is destined to carry afar off its warning signal,—or to the slender mast, when the flag waves at its top,—or with the bridge, when the gracefulness of its arches appears to be resulting, rather, from the best contrivance to its useful purposes, than from a separate and intentional end,—may be open to doubt.

If the rule that use and purpose must be the end, sometimes misapplies altogether, with respect to purely ornamental objects, such as porcelain jars and vases, ornamental flowers, arabesques, &c., it is, most probably, when the purposes of utility of such objects are so slight, that they are lost sight of, and their particular form and arrangement can have no other aim than elegance itself; for, since they have no pretence to usefulness, we cannot disapprove that they should claim to be designedly graceful or ornamental.

ELEGANCE.

What has been said of the Graceful, will, in a great measure, apply to Elegance; and, as it is not my wish to create more distinctions than are consistent with the impressions, of a definite character, which are connected with certain classes of objects, I need not dwell upon a term which, in several of its applications, becomes synonymous with gracefulness. It is, perhaps, more extended and indefinite in its applications, than the term "Graceful." Thus the term "Elegant," may be applied, indifferently, to a composition in painting, to a style of writing, as well as to various kinds of buildings; whereas "Graceful" is chiefly limited to those objects and compositions, to which lightness and delicacy may be applied. Elegance characterizes the manners of a nation, and Grace those of an individual. It may be further remarked, that Elegance frequently requires an

accompaniment of acquired qualities, which simple and artless grace rejects as superfluities. A woman may be elegant from the union of very dissimilar qualities, by her manners, and in a great measure by her style of dress; but she owes gracefulness chiefly to natural delicacy and ease. Owing to the ideas of rank and high breeding which are sometimes associated with the term "Elegance," it may be applied to man; which, again, shews that it differs in some respects from the Graceful, which is applicable chiefly to the female sex, and to childhood.

Thus, from its simple and unadorned nature, Grace suggests less the concurrence of various qualities than Elegance does; and, though both are generally associated in the same object, Grace has the most distinct and definite meaning, and we may conceive it to be more independent of Elegance, than Elegance of Grace.

PRINCIPLES NECESSARY OR CONDUCIVE TO THE PERCEPTION OF THE BEAUTIFUL.

COMPRISING

ASSOCIATION.		CONTRAST.
VARIETY.		DESIGN.
REGULARITY	AND	SYMMETRY.
INTRICACY.		INDISTINCTNESS.

ASSOCIATION.

BEFORE considering the principles which, like variety, contrast, and symmetry, have a direct influence in causing impressions of the beautiful, I will introduce the important principle of Association, which is less determinate, but more extended in its influence.

Alison claims a great share of influence for this principle, in the enjoyment which is connected with the contemplation of nature. The leading views propounded on this point, in his introductory essay, are clear and satisfactory. The object which the author appears to have chiefly in view throughout his argument, is to prove that it is not the form itself of matter, which causes our pleasure in beholding it, but the expression or meaning associated with that form; that it is, in fact, the sign, and not the substance, which infuses various emotions into our minds; and he points out successfully, that the relation which our internal impressions bear to the various external signs presented by nature, becomes the source of

an endless variety, in the pleasures which result from this association.

I should not omit to allude, here, to a very apposite remark to be found in the "Penny Cyclopædia," under the article "Beauty;" since it establishes a distinction between Association as applied to Form, and as applied to Colour, and thus affects the question at its onset. The author of the article referred to, observes, "The beauty of visible objects consists of two parts, viz. the *beauty of colour* and the *beauty of form*, which, although closely connected with each other, arise from different sources, and from sources of a different character, inasmuch as the one appears to be, in most cases, a simple emotion, and therefore an ultimate fact, of which no explanation can be given, while the other is a pleasure derived from association, which is susceptible of analysis." I might be willing to admit, with the author of the article, that the emotions of beauty are, with regard to colour, facts, with which association remains perfectly unconcerned; but this conclusion could apply only to colour uncombined, and unconnected with form; for no sooner does colour become modified, either by changes and combinations which regard itself, or by its relations with form, than it becomes, in common with the latter, a promoter of all those various and combined impressions, towards which the association of ideas contributes so large a share of interest.

If we admit that certain colours please, of themselves, more than others, we do not thereby prove, that they cannot be rendered more pleasing still, by Association, and that, in fact, the associating principles which

apply to form, are not connected, more or less, with the different appearances of colour. The intimate relation of form and colour is shewn, whenever we replace the usual colour of any object by one less fitted for the purpose. Every one is aware how unsightly most objects of use or ornament would appear, if dressed in colours opposite to those which are customary. If, therefore, the relation of the form and purposes of the object to its colour, be so intimate, we can hardly suppose that the principles of association which would apply in one case, would fail to do so in the other.

Returning to the inquiry as to the general influence of association, I will here introduce one or two circumstances, which, it may be, are familiar to most short-sighted persons, shewing that, at the first glance we obtain of an object, it is the impression which is associated with it, and not the object itself, which takes hold of our mind, and that there is an instantaneous connection between the external forms of objects, and previously acquired impressions. I have mistaken white linen, floating, at a distance, in the wind, for the steam of a locomotive engine, the motion of the linen producing exactly the same effect as that of the sudden jets of steam. A few moments sufficed to destroy the illusion; but this did not take place gradually during that time; and although the image of the linen, fluttering in the wind, which appeared at first so perfectly to represent steam, must have been gradually modified as I advanced, the impressions which I received, were not progressively changed; but when I hit, all at once, upon the fact, a revolution, equally sudden, took place in my ideas, and

the meaner impressions which are associated with the drying of linen, were at once substituted for those which are connected with a train in motion. A white railing has presented such a perfect resemblance to water, as to produce, likewise, complete deception, for a few moments: and in this case also, my ideas, as I advanced towards it, did not pass gradually from the impressions which are connected with a smooth sheet of water to those which belong to a white railing, as would have been the case, had my thoughts followed the progressive transformation of the image impinged upon the retina; but the idea of the railing came all at once upon my mind, and this idea, rather than the visible object, suggested impressions entirely different to those which are connected with the characteristic appearance of water. If others have experienced impressions, similar to those which I have here described, when discerning objects indistinctly at a distance, we may conclude, that the immediate and usual effect upon the mind, of an object as it becomes visible, is, to suggest a train of thoughts bearing on the nature of that object.

Whenever uncertainty, or improbability, is connected with the appearance of any object, as sometimes occurs in travelling, a sensation of uneasiness is produced; whereas, the discovery of the true nature of the object doubted about, is attended with emotions of satisfaction; thus realizing, in a very evident and palpable manner, the fact, so generally admitted, that it is to the evidence, afforded by objects, of their aptitude and fitness to their intended purpose, that all our ideas of their harmony and perfection are to be ascribed.

Early developement of the influence of Association. —If, from these familiar examples, we pass to those more extended and general influences, which are connected with Association, we shall equally find that it has an important share in producing those pleasures which we experience in beholding the scenery of nature. We may trace this varied influence of Association, even in early infancy. The kind of delight which is manifested by children in the use of toys, is, in a great measure, derived from the relation of these toys to objects of use, or of greater value and importance. A child does not content himself with admiring the pretty colours, or the fanciful shapes, of a little set of culinary and other similar apparatus, but takes pleasure in putting them together, in the same manner as would be required for the use and operations of real utensils. He sets his dishes in array, builds a house with his bricks, tries the locomotion of his carriage, and the speed of his horse. All these are, doubtless, pleasures of association, which feed and satisfy the mind of the child, in the same manner as the river with its boats, suggestive of easy motion, of trade, and other similar ideas, and the forest, telling us of the wild herds and feathered flocks which people its recesses, or filling us with the more indefinite impressions which are connected with the growth and character of trees, afford, in our later years, charms, linked together, and heightened, by Association.

It may be urged, as a defect of this theory, that Association must have a beginning, and that objects or scenes must, in the first instance, afford us direct pleasure, in order that the recurrence of them, or of such circum-

stances as are fitted to cause a renewal of the impressions previously felt, should inspire us with joyful sensations. In answer to this difficulty, we may suppose the condition of the mind to be such as to require constant change for its entertainment, and that, unless frequently enlivened by new objects and circumstances, it would grow heavy and oppressed. Variety is, indeed, the natural food of the mind. To escape from the monotonous occupations, and confined atmosphere, of the apartment, is, in itself, a change, fraught with sensations of pleasure, at all periods of life; and this pleasure is proportionate to the novelty and striking character of the objects, which a flight into the expanse of nature introduces to our notice. The seeds of pleasure having been thus sown, a renewal of the objects or scenes which first caused this pleasure, or an impressive allusion to them afforded by other scenes and objects bearing a striking resemblance to the former, becomes the germ of associated enjoyments. Thus, the mind of the child, which, in the first place, demands only to be called from one bauble to another, because the second differs from the first, and thus affords variety to its imagination, learns, by degrees, to connect new ideas with new playthings; its embryo affections and passions are roused; one toy excites wonder, a second promotes daring, a third inspires ambition, and a fourth begets fondness and love; all of which, being primitive sources of emotion, open the way to the more extensive and varied pleasures of association. The kite continues to amuse, after the wonder caused by its ascent into the air has subsided; whilst the box of

little agricultural instruments yields a prolonged interest, by affording occupations, which the infantine, but aspiring mind of the child, gladly associates with those of husbandmen.

It will, I think, be perceived, that Association thus begins almost at the same time as the pleasure which is derived from novelty. It is so intimately connected with it, and tends so much to its increase, that the distinction is exceedingly faint, and often indefinable. Whenever we are struck with sudden surprise and admiration at the aspect of great and beautiful objects, the sensations of pleasure are, as far as I can judge by my own experience, of a primitive kind, and almost unconnected and unassociated; whereas, the pleasures of association chiefly prevail, in the contemplation of those scenes which have ceased to overpower the mind with novelty and wonder, but leave room for pleasing reminiscences, founded on circumstances dear to us, or on previous enjoyments perhaps oftentimes renewed. We may, doubtless, ascribe to surprise and admiration, the pleasure which we derive at the first sight of the Alps, or of any other extraordinary works of nature. After the enthusiasm of the first moments has subsided, the more indistinct impressions connected with the maintenance of the snow under a glaring sun, and the size and number of the rivers which it supplies, as well as the practicability and manner of sojourning in these peculiar regions, successively maintain the interest. But, though the pleasures of association may thus gradually prevail, the first, and consequently the most

powerful impressions, are wonder and admiration at objects so extraordinary and beyond the sphere of conception.

Thus, in endeavouring to follow the connexion between the various pleasures of sight, through the progressive developement of the mind and expansion of the intellect, it appears to me that we may ascribe the earliest sources of pleasure to change and novelty, to which succeed the excitation of the tender and noble passions, and those primary impulses of delight which emanate from an intellectual relationship with the works of the creation: the pleasures of Association then follow, closely interwoven with the primitive emotions, in their varied and far-extending influence.

Alison's views on Association considered.—However forcible may be Alison's conclusions, in his introductory essay, respecting the influence of Association, one cannot read through his work, without perceiving that he has, in several cases, given too great an extension to this principle, and embarrassed a subject which he had begun with a clear exposition. For instance, taking up views entirely opposed to those which I have quoted from the "Penny Cyclopædia," he ascribes almost entirely to Association, the beauty of colours; and we are compelled to infer, from what he says on this subject, that they have, in themselves, little or no power to please, and that every attraction which they possess, proceeds from our habit of connecting them with various prereceived impressions, such as may result from their having obtained the sanction of rank and fashion when applied to dress. In observing

(vol. i. p. 303), that "no new colour is ever beautiful until we have acquired some pleasing association with it," Alison seems to forget, that, in aërial effects, we are frequently struck with the beauty of colours which we either never saw before, or which, from their seldom occurrence, add the charm of novelty to their natural splendour; and that the introduction of a flower with which we have not been previously acquainted, becomes a most usual source of delight.

In alluding, in his introductory essay on the emotions of Sublimity and Beauty, to the additional attractions imparted to certain spots, from the recollections awakened by them of memorable events, Alison seems to have entertained an ill-founded opinion, that the interest of deeds of renown, or of political importance, associates itself easily and naturally with the sublimity and beauty of scenery; an opinion which I am so far from sharing, that I believe the existence of any striking natural beauties, like those which the passes of the Alps afford, would have the effect of obliterating in the mind of an observer, the impressions which are connected with any important but remote event, such as the passage of Hannibal, excepting in those moments when the admiration of actual and present grandeur, gives place to meditation; and that the interest of a memorable action is, in general, more easily revived, in proportion as the locality in which it occurred, abounds less in such natural attractions as would divert the attention from considerations of the past.*

* See "Accidental Association," p. 86.

Alison, elsewhere, bestows considerable pains, in detecting the influence of Association on various kinds of lines,—on those signs which, being disconnected with any useful or interesting purposes, are least of all subjected to its influence;* and he is thus led into arguments which appear to be wanting in his usual force and penetration. He observes that strong and angular lines express strength and harshness, and are therefore very seldom beautiful: and that strong and winding lines express strength and gentleness or delicacy; that their effect is mutually destroyed, and that they are, accordingly, indifferent, if not unpleasing. Amongst others, Alison discusses the merits of a fine and angular line, which he maintains to be beautiful, only when the expression of delicacy prevails over that of roughness. This seems to be little else than a contradiction, since we find neither in nature, nor in our own ideas of harmony, fineness associated with roughness or jaggedness. The feebleness of these arguments evidently results from the application of Association to things, which, in themselves, are as little connected with it, as are geometrical propositions. The extension of a principle beyond the due limits of its influence, has, doubtless, misled many; and by thus endeavouring to carry beyond the bounds of their real merit, the principles of beauty ascribed by Hogarth to simple lines, Alison seems to have used, unawares, the best possible argument in favour of those principles of Association, based on character and expression, to which he elsewhere rightly assigns so ex-

* See Allison's considerations on "Accidental Association," vol. i. p. 336.

tensive an influence. If we may allow, with him, that fine lines are, in general, to be preferred to strong ones, it is, doubtless, because they convey to us the impression of slender and delicate objects, or, if not of objects slender and delicate in themselves, of those, at least, which are rendered so in appearance, by intervening space and atmosphere. When delicate lines are made to represent hard and massive objects, they affect us less agreeably than would heavier lines, which are more consistent with the nature of such objects. With respect to smoothness or roughness, I think it will be found, that our approval or disregard of these qualities, in abstract lines, arises chiefly from the impressions conveyed by them, of skill or clumsiness in the tracing of them. It is a matter of mere practical dexterity.

It is, however, sufficiently shewn by the general tenor of the argument in which these remarks on the beauty of lines are introduced, that Alison, himself, attached no great importance to form, independently of Association; and his division, or classification, if it may be so termed, of the various influences of Association, is, if considered with respect to its general tendency, and not to some accidental errors, particularly calculated to instruct the mind respecting the pleasures which are connected with the perception of various classes of objects. These leading divisions, as given, nearly in the words of the author, are, firstly, the expression which we connect immediately with any particular forms in nature, which he calls their Natural Beauty; secondly, the qualities of design, fitness, or utility, indicated by these forms, called their Relative Beauty; and, thirdly, the

Accidental Associations which we happen to connect with them.*

Alison establishes, in connexion with his second principle of association, namely, the relative beauty of forms, three further distinctions,† which I will now consider. These are based, in reference to a given object, on the excellence or wisdom of the design; on the fitness or propriety of the construction; or on the utility of the end. The first consideration appears to me but the complement of the two last, since the excellency of the design, with regard to any work or object whatever, is in exact proportion to the utility or greatness of that object, and to the fitness of its construction to its intended purpose. That object is the most excellent in its conception and design, the aim of which, having been best fulfilled, is at the same time of the highest order. The representation by art of this, Alison's second principle of association, consists, it must be acknowledged, in nothing more, than in making a thing appear fit for the purposes for which it was intended,—a man or beast fit for action,—a house for occupation,—water smooth and flat,—clouds light and buoyant, &c. It is a faithful, though, it must be added, intelligent, imitation of nature; for, if not effected with a certain degree of skill and art, the representation of these material and living objects, would not convey the impression that they are well adapted to fulfil their respective purposes. The kind of beauty, therefore, which objects acquire from this principle of association, being founded on their ma-

* See Alison's Essays, vol. i. p. 318. † Vol. ii. p. 57.

terial or physical adaptation for use, is of the simplest description, and ought, I think, to have been placed the first in the order of Alison's treatise. It is a kind of perfection which is satisfactory, because necessary and understood by every one; and the want of which produces uneasiness and discomfort. Its faithful translation in the language of art, affords, chiefly, that kind of satisfaction which we experience at striking examples of practical skill.

That kind of Association on which Alison makes the Natural Beauty of objects depend, being based on the characteristic, intellectual, or moral, expression of objects, does not refer to the circumstances of our common wants, and is less within the compass of our habitual thoughts. It requires, therefore, a greater intellectual effort and power of the imagination, to transmit to an observer, by any process of art, those emotions which are due to this kind of Association. Since, however, the expression of grandeur, beauty, and power, in the objects of the natural world, speaks eloquence to the mind, and makes a direct appeal to the sympathies of man, it is by the association of these and similar emotions, that art, especially the art of Landscape Painting, acquires one of its most successful means of affording delight. It is a means of very general resort, admitting of taste and judgment, but without pretence, and almost without danger.

Accidental Association.—Those indirect and varying pleasures of Association, which are connected with what Alison terms the Accidental Beauty of objects, may either be limited to individuals for whom certain places

and objects have a peculiar kind of interest, or they may be general, that is to say, they may affect a large body of men, or a whole nation, provided all its members may equally receive pleasure from becoming associated with any particular event or incident. It is evident, that it is only when applied to large masses of men, that this kind of Association can be rendered available to art, since it is necessary that all who witness any object of art, should be alike partakers of the interest which may accrue from Associations of this kind. The employment of Accidental Associations, both in painting and in sculpture, may become highly advantageous, if limited to the clear indication of remarkable facts by some simple and natural means; for instance, by the circumstances which are peculiar to the habits of animals, or to the growth of plants, or by some sign or episode ingeniously introduced: but supernatural appearances, or inconsistent and improbable occurrences, often lead to great absurdities, when resorted to for this purpose.

M. Quatremère de Quincy devotes many pages of his work on the Ideal, to what he terms the "Metaphoric Style of Painting," and which is based chiefly on the interest which is derived from accidental or distant Association.* Apparently desirous of impressing French artists with the great advantages of this style, he enters into a long explanation of the different modes by which it may be introduced into painting and sculpture. He recommends the naked figure, as well as the Greek costume, on the principle that any departure from the

* See "Essai sur l'Idéal," dissertation ii. § 5.

matter-of-fact expression of modern usages, is favourable to ideality. He even goes so far (though he perhaps expresses himself rather indefinitely on this point) as to recommend, in historical compositions, a departure from real form and action. He alludes, in support of these principles, to the diversity of manner in which different individuals would view and delineate the same object, though present before them; and adds, that the dissimilar descriptions, and antagonist views, which are entertained by different persons, concerning by-gone occurrences, produce still greater differences in the form in which remote events have been transmitted to us. In the metaphor, the author generalizes an extensive subject in a simple idea or expression. A still further condensation constitutes what he terms "the Allegory;" but he agrees that in the fine arts, the allegory is chiefly employed in bas-reliefs, medals, and such cases in which the want of space does not admit of the full developement of the subject represented.* M. de Quincy has shown himself judicious in making this reserve; for however pleasing the metaphor may appear, when introduced as a mere episode in the leading subject, it would evidently be a departure from the general principles of art, to make so conspicuous a use of it, as to substitute an allegory for the true and natural representation of any event. The carrying of this principle a little further, would inevitably lead to the conclusion that a mere sign or hieroglyphic would have the same merit as a finished picture, if the meaning conveyed by it were equally im-

* See "Essai sur l'Idéal," dissertation ii. § 11.

portant and extensive. Of what use would be, in this case, lights, shades, colours, transparency, depth, and harmony? Our principle of operation would be changed; we should have substituted one art for another; and we might as well make the substitution complete, by using letters instead of signs.

The kind of Association termed by Alison "Accidental Association," to which I am still alluding, may sometimes be introduced successfully, and with propriety, into historical paintings, provided the scene represented, be such a popular one, that the observer would easily detect, and perhaps seek of his own accord, any incident tending to give the subject an interest and an expression, different to that which it at first sight appears to have. If the subject be a less familiar one, the incident which serves to link the events expressed with those which are alluded to, or understood, should be rendered the more clear and distinct. Unless the metaphoric allusions are rendered, in this case, conspicuous and evident, the features and attitudes of the figures must appear false and unmeaning. Every look, gesture, and expression of passion, will either appear without object, if the cause be not made evident, or will be attributed to a different and more probable cause; for we are always disposed to give the most probable and natural interpretation, to the composition of the artist, until we have clear and evident reasons for inferring that a more remote one has been intended.

In the Landscape, the introduction of Accidental Associations, that is to say, of remote principles of interest, is fraught with much greater difficulties and

chances of failure, than in the Figure. The means of pointing out indirect events, are there much more limited, and their introduction, if not made with much taste and contrivance, would engender triviality. The beauties of nature are, of themselves, as elevated and engrossing, as the associations and sympathies immediately connected with them, are extensive and lasting; whereas accidental Associations, even those which have some historical interest, seem to partake of a character of littleness, when compared with the works of nature; but their insignificance, when introduced into landscapes, arises, I presume, still more, from the difficulty of pointing them out in a distinct and satisfactory manner. It cannot be easy to impress on a composition, at the same time, the sublimity of romantic nature, and that kind of interest which is connected with particulars of mere local or personal import; for the attempt thus to produce a twofold meaning in the same subject, gives rise to stiffness and constraint in the expression of either.

It can, I believe, scarcely be doubted, that the striking inconsistencies which sometimes appear in the landscapes of the present day, arise from the attempt to introduce unusual and peculiar effects; and that, in historical pictures likewise, a great many defects are ascribable to the circumstance, that artists generally seek novelty of expression, in some remote and far-fetched interpretation of a subject, instead of contenting themselves with those more simple and obvious truths in connexion with physiognomy and the signs of emotion, which come at once home to the feelings of the observer.

By consulting, in the expression of his subject, the most natural turn which the action would take at the moment of the deepest interest, the artist conveys at once to the observer, the impression of consistency and uniformity of design; and I believe that a little reflection will bear the conviction with it, that the productions of an excited imagination, however bold and energetic, would fail to afford any permanent delight, unless governed by such a degree of consistency and truth, as would render the expression of the subject at once congenial to the deep-rooted sympathies and feelings of every one. It appears highly probable that we may, in a great measure, ascribe to a departure from this principle of simplicity and unity of expression, in modern historical compositions, the great falling off which characterizes them, in the eyes of almost every observer, when compared with those of the old masters; and I may perhaps add, that it is the more general adherence to it in the landscape, which has determined the steady and uniform progress observable in this branch of art, considered in its most comprehensive developement.

CONTRAST.

I will here consider, chiefly, those points in relation to Contrast, which affect the imagination; reserving for another part of the work, those which relate to chiaroscuro. The contrasts which chiefly operate on the fancy, are those of *proportion* and *expression*. Contrast

of proportion makes a thing appear either larger or smaller than it really is; and contrast of expression makes a thing appear of a different character,—softer or rougher, livelier or gloomier, more gentle, more severe, more delicate, or more coarse.

Contrast of Proportion.—Examples of this kind of Contrast are afforded by every colossal monument of art which is set off by diminutive objects. For instance, the apparent height of a gothic tower, or cathedral, is increased by the elaborateness of its decorations; and the statue of a giant is shown off by another limited to the proportions of the human stature; for it is well known, that without objects of comparison, having distinct and uniform dimensions, no exact idea can be formed of the size of architectural monuments, nicely proportioned, nor, in many cases, of the dimensions of a figure, the parts of which are well adjusted. Indeed, the more perfect the adaptation of every portion of the whole, whether it be a building, an interior, or a statue, the more readily the eye of the observer is deceived respecting its real magnitude. The disproportion of any one of the parts, betrays the impotence of the artificer to carry out so great a design; the eye detects the littleness of the hand which has raised the structure, and the visible marks of effort seem to indicate that the scale of the work is exceedingly great. Where the harmony of the parts equals the boldness of the design, no apparent labour is perceived, and the dimensions of the work can be discovered only by the relations of external objects. Thus, Contrast of Proportion, based on the relative dimensions of various objects, becomes

one of the most useful and available means of giving grandeur to a composition. But the method of increasing the apparent size of objects, by comparison, if made to exceed what is natural or probable, as it frequently is in the imitative arts, must have a very bad influence with regard to those truths which depend on correct drawing and perspective.

Contrast of Expression.—With respect to contrast of expression, it becomes generally and strikingly apparent in those opposite forms, habits, and dispositions, which are manifested in the various tribes of the animal creation; such dissimilar and opposite characters as slenderness, agility, gentleness, or docility, opposed to bulk, sloth, fierceness, or voracity: but in the vegetable kingdom, where contrast of expression is chiefly limited to differences of form, it becomes manifest, with less extension and variety, in such differences of character as are exhibited respectively, by the various trees and plants. And whereas, in the pastoral scene, the fleecy coat is opposed to the bristly hide, exertion and vigour to an attitude of repose, the landscape-painter opposes the ruggedness of the thorn to the lightness of the birch or willow, as did the poets of old, the grim deformity of Vulcan to the grace and delicacy of Venus. The influence of Contrast is perhaps less evident, with regard to the beauty of the human form, considered individually. It is by its opposition to symmetry, that the variety of contrast there becomes chiefly apparent; for in the limbs, symmetry and an exceeding variety of form appear most remarkably contrasted and blended at the same time.

And yet, in the higher branches of art, of which the

human figure is the basis, it must be acknowledged, that, as a source of pleasure, Contrast is inferior to those perfections which constitute grace and beauty, and more especially to the expression of the emotions, sympathies, and affections. Its influence is chiefly confined to the relations of various objects, or of different parts of the same object. Here are its limits; and we lose all traces of it, as soon as energy of expression, intent of purpose, combined with a lively sensibility in the airs of the countenance, awaken that kind of interest which is felt with enthusiasm.

Contrasts of Succession.—Impressions connected with the pleasures of contrast, are likewise those of change, novelty, or surprise; but these relate more particularly to contrasts of succession, and are, therefore, little available for the purposes of art, which only embrace one moment and one scene of action.

Contrasts of succession are those which occur in the progression of the day, particularly at sunrise or at sunset, or which entertain the traveller as he journeys along, when plains succeed to precipices, and cultivation to the wilderness. But although the interest afforded by transitions of this nature, cannot be communicated immediately to the observer, by any style of art, they may still be made conducive to the pleasure and entertainment of a composition, when they appear to be pointed out more or less indirectly. As for instance, the light of dawn which breaks forth from the east, by conveying to the mind the impression of a rapid change which will soon light up every object still buried in the uncertainty of gloom, kindles the fancy, and suggests a thousand imagi-

nary objects very remote from the positive expression of colour; and although, as far as the features of the picture are concerned, minutes pass away without the dissipating of a single shadow, without a single gilded ray appearing on the mountain tops, the fancy discovers, during that time, the beautiful tints of dawn spreading over the hills and distance, and pictures to itself the shadowy forms kindling into a brilliant existence, as they successively emerge into the sun's effulgence. In like manner, the energetic expression of a storm may be rendered so engaging, that the imagination becomes concerned with all those changes which succeed each other with such beautiful effect, when nature is in active operation.

Impressions of succession are often communicated by a form of composition which points out more than it discloses to view, as is effected by the half concealment of objects; whereas the fancied power of penetrating beyond the visible limits of the scene, is greatly checked by the want of space and atmosphere, which results from a too-crowded arrangement.

VARIETY.

We find mentioned in Montesquieu* that Variety is one of the chief sources of beauty. This is a fact which few persons would think of controverting; but as a

* "Œuvres de Montesquieu. Essai sur le Goût. Des Plaisirs de la Variété," p. 590.

thorough conviction of its truth would be most likely to result from the knowledge of the arguments which might be raised against it, I will introduce those which have been used, in opposition to the opinions of Montesquieu, in a modern French work on the imitative arts, by M. Kératry.* The author observes, as a proof that we do not naturally court variety, that we often seek for scenes already familiar to us, in preference to new ones, and that there is within us, a growing attachment for the same object, which would not be the case if variety and change were one of the chief sources of pleasure. But, although every one should agree, with M. Kératry, that there is, in our disposition, an increasing fondness for things, as we become more conversant with them, and that we love to sympathize with old places and old recollections, it does not follow that this disposition prevails to the exclusion of all others, and that there is not, at the same time, a decided and prevalent taste for change and variety. They are, in fact, two distinct principles, doubtless both equally necessary, and equally in harmony with the other attributes of our mental organization. The disposition alluded to by the commentator, would have the effect of increasing the interest which we feel for any particular work of art, such as a picture or a statue, as we have it longer in our possession; and, though we should even, at last, get to cherish it as a darling object, we should not wish to see its resemblance in all other pictures or statues, but be gratified, as before, with regard to art in general, by diversity and novelty. The eagerness with which we seek

* "Du beau dans les arts d'imitation." Paris. 1822.

the excitement, not only of new compositions, but of new styles of art, proves that there is a taste for change, not less than a growing endearment for the same objects.

But our love for novelty applies, chiefly, to that diversity which is demanded of a succession of works. That kind of variety which enters into the composition of a single work, is governed by the many other principles, such as character, elegance, harmony, and others, necessary to its perfection, and becomes subservient to the rules of taste.

If a conclusion could be drawn against the existence of any one inclination within us, from the prevalence of an opposite one, we might object to the predominance of a taste for Variety, upon the ground that there is, in general, a decided predilection for simple forms. But this only shows, that it is not necessary that the exclusion of one sentiment, should follow the introduction of another. The impressions which are usually connected with simplicity, are those of effecting a great purpose with little means, of a discerning economy of material and labour,—consequently of intelligence and skill. These impressions do not, in the least, interfere with that pleasure which we owe to Variety. Simplicity and uniformity, far from being principles opposed to Variety, in the extensive scale of nature, are, on the contrary, highly conducive to it; for, in order to produce diversity, in a scene composed of many objects, it is necessary to have recourse to a principle quite opposite to that which ensures variety in one object only. For instance, uniformity in a single object will sometimes produce sameness and monotony; whereas, in a

scene composed of many objects, it will add to the variety of the whole; for, if the greater number of the objects be irregular and complex, the more simple and uniform is that which we oppose to them, the greater will be the variety resulting from this combination.

It is pleasing to observe the coincidence of several authors in assigning this character to the variety of nature. Price observes to this effect: "The true end of Variety is to relieve the eye; not to perplex it: it does not consist in the diversity of separate objects, but in the diversity of their effects when combined together; in diversity of composition, and of character." And further,—"There is no having variety of character without a certain distinctness, without certain marked features on which the eye can dwell."* And Stewart remarks;† "A deviation from uniformity, in the grand outlines sketched by the hand of nature, enhances to an astonishing degree, the delight arising from the regularity, which, in her minuter details, she everywhere scatters in such inexhaustible profusion." And Alison, —"Beautiful forms must necessarily be composed both of uniformity and variety; and this union will be perfect, when the proportion of uniformity does not encroach upon the beauty of embellishment, and the proportion of variety does not encroach upon the beauty of unity."‡ Lastly, in old Hogarth, we find, as clearly expressed as in any other author, that Variety does not result from the most dissimilar forms accidentally mingled together,

* "Essays on the Picturesque," vol. i. p. 235.

† "Philosophical Essays." Third edition. P. 284.

‡ "Essays on Taste." Sixth edition. Vol. ii. p. 105.

but from certain combinations of regular and complex forms;—"How great a share Variety has in producing beauty, may be seen in the ornamental part of nature. All the senses delight in it, and equally are averse to sameness. Yet, when the eye is glutted with a succession of Variety, it finds relief in a certain degree of sameness; and even plain space becomes agreeable, and, properly introduced, and contrasted with Variety, adds to it, more Variety. I mean, here, and everywhere indeed, a composed Variety; for Variety uncomposed, and without design, is confusion and deformity."*

Other examples might be quoted, and it would be found that most authors agree, not only respecting the great prevalence and value of Variety, as a source of Æsthetic pleasure, but as to the nature of the Variety which forms so essential an ingredient in all works of taste, and which constitutes the beauty of relation. For although I may not be inclined to admit, with Diderot, that relation constitutes an essential and exclusive principle of beauty, throughout all nature, yet there can be no doubt, that the relation of parts in single objects, and the relation which these objects bear to one another in the varied elements of a complex scene, constitute the charm of Variety itself.

Variety in a simple object, such as a vase or a jar, results from the slightest deviation of lines, or from the most trifling increase or falling off of a curve; and the introduction into these simple forms, of those marked distinctions and differences which apply to various classes of

* See Hogarth's "Analysis of Beauty," chap. ii.

objects, would destroy their unity of purpose, and their propriety as individual objects. But, in the variety of nature at large, there is as much diversity and contrast of form, as there is characteristic difference in the nature and uses of the various objects there assembled. Variety is but a multiplication of contrasts, sometimes violently antagonizing, sometimes gently diverging, till lines blend into conformity.

Variety is not a principle connected with any peculiar forms of objects, but its sphere extends throughout all nature; and, abstractedly considered, it is inseparable from the order and relation which all objects and effects bear to each other, and is entirely dependent, in the scenery of nature, on the principles which constitute character and expression. The charm which has been so often attributed to intrinsic beauty of form, may, doubtless, in many cases, be ascribed to the expression which is derived from the influence of surrounding objects. For instance, Hogarth attributes a peculiar beauty to the tapering form of the spire; whereas, the beauty which we similarly attach, under various circumstances, to the square and other diversely shaped towers of churches and cathedrals, shows that the beauty of the spire is chiefly one of relation, and not an intrinsic quality. In landscape scenery, where the rounded and indeterminate forms of vegetation prevail, the regular taper, and sharp apex, of the spire, form a decided transition, and become greatly conducive to beauty. It is a remarkable instance of an upright and lofty object standing well by itself, unassociated with other vertical lines destined to break the suddenness of the transition. Other examples may, doubtless,

be found, in which an outline abrupt and peculiar, may stand out from a different class of forms, without bad effect; but more frequently, the most violent transitions require to be mitigated by others less decided: and, at the same time that it may be well, for the perfection of Landscape-painting, to study the causes of that endless variety, which results in nature from various and often antagonizing forms, it should be remembered, that the same art has other demands, such as softness, elegance, and harmony, which often require that the extremes of Variety and Contrast be suppressed, and that the gentler transitions be resorted to.

DESIGN.

The influence of Design, in producing impressions of the beautiful, has been already alluded to in so many parts of this treatise, that there can be scarcely any necessity for adding any more special remarks, unless it be to avoid the appearance of an omission, with regard to one of the most important elements in matters of taste. There is scarcely an author, from Père André to Hogarth and Reynolds, who, in the developement of his theory, does not, more or less, pay tribute to the far-extended principle of Design. It may be traced in the ideas of relations of Diderot, in those of custom proposed by Reynolds, in the fitness for purpose and use held in so much account by Hogarth, in the principles of

beauty laid down by Blair, in Stewart's remarks on association, in Home's theory of beauty, and in Alison's essays, as one of the principal agents in the production of the pleasures which are connected with sight.

Raphael Mengs, with less consideration and argument than Alison has devoted to this point, shows, concisely and forcibly, (judging at least from the French translation of his work on beauty and taste in the art of painting,) the important share which may be attributed to Design, in forming the impressions which we entertain, of the perfection of natural objects. According to his doctrine, "Beauty is found in every object, if it be perfect with reference to the idea which we especially attach to it. It is to be found everywhere (*en toutes choses*), because nature has formed nothing that is useless. The impressions which we entertain concerning all objects, are inseparable from the knowledge of their use or destination: beauty exists in all, when their substance and destination may be associated in the same idea. That our impressions concerning the beauty of objects, are determined by the ideas which we entertain of their nature, is evident from the number of opposite ones with which we equally connect ideas of beauty. Beauty proceeds from the harmony of substance with our impressions concerning it; and our impressions, from our knowledge regarding its destination;"—and the author ascends hence intellectually, stage by stage, to the Divine Source of all things.*

* The above citations, translated from the French edition, are somewhat condensed, and changed in the order of their arrangement. See "Œuvres Raphael Mengs, traduites par Doray de Longrais." 1782. P. 68, &c.

This is the kind of argument, which, with regard to its general import, may be found repeated over in most languages, and in most periods, since a decided interest has been awakened for matters of taste; though, at the same time, the spirit of opposition and censure, which has so generally prevailed amongst writers, has given to the various opinions entertained, the appearance of the most perfect dissent from these conclusions. The important points of coincidence, which are so easily detected, in the general convergence of opinions at large, seem to have been overlooked, in the attempts which have been made to overthrow doctrines and systems by pointing out particular instances of disagreement.

Design, like most other principles which have been brought forward as causes of the beautiful, will not stand the charges which may be made against it, if it claim to be the germ and essence of that which, in our sight, is admirable and excellent. Like fitness, regularity, and order, it has an important share in determining those shapes and features which are pleasing to the eye, and satisfactory to the understanding; but, far from being universal, self-sufficient in every respect, and an answer to every inquiry, it can, at most, pretend to afford some clue to our most habitual emotions, and to inform us what forms of objects are, generally speaking, best calculated to afford us, not so much the delight of enthusiasm, as the satisfaction which attaches itself to propriety. Neither the enchantments which belong to wild and desolate nature, nor those which pertain to female beauty when enhanced by unconscious negligence, are comprehended in that expression of the beautiful, which is

fingered out to us by the word *Design*. All is mystery and uncertainty, when the ardour of enthusiasm, excited by any scenes or objects whatever, is unbounded: Design does not suggest itself, till the mind has become sufficiently calm to admit, to a certain extent, of the exercise of reason and judgment, or (as in the inspection of specimens of architecture, and other productions of art,) to allow acquired knowledge, and the habit of judging, to have some share in the impression which is connected with the thing observed. These are so far from predominating on all occasions of unbounded pleasure, that our delight, in such moments, seems to partake of the nature of surprise and admiration at an effect obtained, apparently, in total defiance of those means of gratifying, which bear the especial print of intention and Design.

REGULARITY AND SYMMETRY.

Regularity is expressed by the repetition of the same form at equal intervals. Symmetry results from the division of a regular figure into equal portions, and applies, particularly, to the appearance of the whole, considered with reference to this central division.

Regularity and Symmetry are abundant sources of pleasure, because these qualities express intention, or design, more immediately, and more distinctly, than any others. Corresponding parts at corresponding intervals, strike every one as being the result of intention; and the circumstance that the slightest want of exactness

is at once perceived, proves how strongly this idea is impressed on the mind. We do not always know why one object or ornament should have its counterpart. We do not, perhaps, at first, discover the necessity of two eyes, or of two ears, instead of one; but perceiving that a Superior Wisdom has deemed fit to provide us with a pair of each of these organs, their similarity of use teaches us, that they must have conformity of structure; and, as we are gratified in perceiving the perfect similarity of these organs, so are we pleased when we discover, in objects of art, that perfect identity of corresponding parts, or Symmetry of the whole, which brings at once home to our minds, the impression of design well carried out.

Hogarth and Alison have both given testimony to the obvious nature of the beauty which results from Regularity and Symmetry, by maintaining, that both childhood, and the infancy of art, take particular delight in the representation of regular and symmetrical forms,* a delight which, Alison affirms, changes its object, whenever maturer years, and more consummate skill, render the imitation of irregular forms of as easy achievement as that of symmetrical ones. In both cases, it is the intention and design, which are manifested by the resemblance of the work of art to the object of nature, which become the source of the delight.

It should, however, be observed, that Regularity and Symmetry, by assimilating the different parts of the same object, as well as by determining the resemblance

* See Hogarth's "Analysis of Beauty," chap. iii. Alison's "Essays on Taste." Sixth edition. Vol. ii. pp. 58, 68.

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of separate objects, tend to confine the ideas which are connected with these principles, as compared with those impressions of the beautiful which result from the variety of nature at large.

INTRICACY.

I concur with Mr. Price, in considering Intricacy to be a source of pleasure distinct from others, and in ascribing to it a position of its own amongst the elements necessary to æsthetic enjoyment. Still, it appears to me to be a mixed source of pleasure, constituted chiefly by mystery, variety, and that principle, without a definition, in the scenery of nature, which excites curiosity, of which modesty is the representative in the relations of society; a principle to which Mr. Price distinctly alludes, in the subjoined definition,—"According to the idea I have formed of it, Intricacy in landscape might be defined, that disposition of objects, which, by a partial concealment, excites and nourishes curiosity."*

This principle, so essentially conducive to pleasure in landscape composition, and which the term *propriety* only partially implies, is not limited to the extreme irregularity and confusion which may prevail in a forest, or in a wild rocky scene, but should enter, more or less, into the arrangement of every landscape composition.

* Price's "Essays on the Picturesque," vol. i. p. 17.

When a picture, in which the sublime and the beautiful are but half revealed in an humble and unobtrusive scene, affords us more delight than would a full disclosure of the grandest objects, we may be sure that the artist who painted the former picture, has alone understood the value of the principle alluded to. It is this kind of unassuming merit, which makes the vignette style so inviting, and renders the glance which is stolen, at an interesting object, through an opening in trees, preferable to an ostentatious display of the most sublime scenery. This principle, although it may blend perfectly with that of variety, which Price justly considers to be another constituent of Intricacy, is, nevertheless, distinct from it. As Intricacy, with regard to objects of sight, is most remote from uniformity and order, it must necessarily afford, in combination with regular forms, one of the most adequate means for the production of variety. The diversity produced by the combination of objects more or less regular and irregular, may be already exhausted, when that afforded by Intricacy, the extreme of irregularity, and the next-door neighbour to confusion, will be still at our command. How could variety be maintained, in scenes wanting the symmetry of buildings, unless nature, in her most intricate combinations, were to supply a degree of irregularity, greatly exceeding that which characterizes her ordinary appearances? Intricacy is not a necessary ingredient of variety, more than perfect symmetry is; but it extends the range of picturesque art, and by enabling the artist to go further in one given direction, than he could do without it, affords scope for diversifying his subjects.

A third constituent of Intricacy, to which Mr. Price does not allude, or which he may have confounded with that modest retiring principle alluded to above, is mystery. No one will doubt of the mystery of a grove of trees, of dark cavernous places, and of the gloom which is now and then cast over wild nature. It is, indeed, an emotion of so elevated a kind, that it becomes one of the principal sources of the sublime. It is, in external nature, what uncertainty and doubt are in a moral sense; and, as nothing adds more to the terrors of pain and danger, than the uncertainty of relief, so, few things contribute more to the greatness of natural scenery, than the mystery in which it is sometimes enveloped.

Mystery, variety, and unobtrusiveness, or something beyond, are, therefore, principles which combine to render that Intricacy in which uncultivated nature abounds, a desirable and important element in landscape-painting.

Hogarth ascribes to Intricacy, a principle very different from the preceding. He connects a peculiar kind of pleasure with the discovery that order and design prevail, where, previously, confusion and chaos appeared to rule. These views, which we find supported, apparently by mere chance, in a passage of Alison,* seem to relate to the pleasure of surprise, which doubtless ensues, whenever order and distinctness succeed to the concealment of Intricacy, but which is wanting when the gloom of uncertainty remains.

* "Essays on Taste," vol. ii. p. 67.

INDISTINCTNESS.

We frequently discover, in the works of artists, the intention of imitating the effects which are peculiar to the deep shadows of nature, because these deep shadows seem to cast a kind of mysterious and poetic gloom over the scenes or objects which are subjected to them. The representation, however, of these shadows, by dark and opaque colour, is not an interpretation of this peculiar expression of the transparent shades of nature. What gives them this character so pleasing to the imagination, is, the Indistinctness and uncertainty which pervade the parts thus thrown into gloom. The effects of dusk and dawn, make us fully sensible of this; whereas, any opaque shadows, even in nature, such as appear in windows, or in dark holes surrounded by intense light, are mere blanks which awaken no sympathy or interest: and it should further be considered, in reference to the use of very deep shadows in painting, that black paint does not represent gloom. Lamp or ivory-black, in a picture, exposed, as a work of art usually is, to a full light, may represent darkness, with reference to the lights of the picture, but would, perhaps, fail to do so, with respect to the darkest shadows accidentally projected into the room. In reference to the latter, the shadows of the picture become black paint, not gloom. Let us remember, therefore, that to obtain the sentiment and ideality of the shadows of

nature, we must aim at an expression different to that of mere blackness; and the more that kind of uncertainty is produced, which, without jettiness, has the true character of gloom, and causes amazement respecting the method by which objects expressed with character, have been rendered, at the same time, indistinct, the more likely is it that the aim of the artist will be successfully attained, and that his work will unite with the vagueness of uncertainty, that transparent airiness which suggests, so agreeably, impressions of space and depth.

REMARKS ON TASTE AND THE IDEAL.

ON TASTE.

A dissertation on Taste cannot, with any hope of arriving at a satisfactory conclusion, be extended to the objects which are subjected to its decisions. It must either bear, as Alison's Essays have done, on the manner of exercising and improving this umpire of the noble and refined pleasures; or, it must have for its object, to define the term,—for instance, to specify whether it implies simple appreciation of beauty, the faculty of distinguishing the relative beauty of objects, or whether it includes the power of applying this faculty, more or less, to some end or useful purpose of art; the solution of which points is but of minor importance.

With regard to the principles on which Taste is founded, it would, in all cases, be necessary to submit the question of their expediency to the taste of others. Whosoever does not subscribe to these conditions, puts forward his own peculiar views on a point concerning which every one claims, as his very first right, independence of opinion; and I believe that no one who knows the fickle nature of the ground upon which such arguments are raised, and the tenacity with which every one desires to maintain his own position, would be very

ambitious of imposing his rules of Taste on others. As it is, arguments are not wanting, to show the uselessness of any attempt to establish a criterion in matters of Taste. Even the writings of Hume and Stewart, notwithstanding many striking remarks, neither afford nor pretend to give, any definite reply to this inquiry.*

Refinement, precision, and quickness, in judging of objects of Taste, are best acquired from such writings as bear immediately on these objects, whether it be in relation to their form, their arrangement, or their applications in art. Little advantage can, however, be expected to be derived, even from direct remarks on select objects of art, unless the eye itself be exercised: and the kind of pursuit which is calculated to be most practically useful, is that which unites with the general data concerning the beautiful and perfect, which are the result of experience, the examination of select specimens of art.

ON THE IDEAL.

Sir Charles Bell advances a theory possessing considerable originality, for the attainment of the Ideal in the various expressions of the human features.† He institutes a comparison between the characters which

* See Hume's "Essay on the Standard of Taste." Also Stewart's "Philosophical Essays." Part 2. On Taste.

† See Bell's "Anatomy and Philosophy of Expression, as connected with the Fine Arts."

distinguish the beauty and dignity of man from the more gross expressions of animals, and gives, in particular, to those which chiefly determine the superiority of the human expression over that of animals, their fullest developement. He even goes further,—he marks those forms of the human head and face, which most effectually convey impressions of dignity, mildness, and the other esteemed characters; and, by somewhat exaggerating, or enforcing, these principles of expression, and by suppressing those which have a contrary tendency, he forms a model, powerfully stamped with the nobler attributes of the mind. This is a very different plan to the one, on the compiling principle, employed by the ancients, and recommended by Winckelmann; but there is no reason why Bell's method should not come to its support, as it may, in some cases, be desirable to exaggerate the signs which mark the noble attributes of man, in order to give additional force and energy to the expression of these qualities. This applies particularly to sculpture, where the uniformity of the material produces tameness, unless every expression of the features be made very prominent; and, in bass-reliefs, and other works of sculpture, which decorate lofty buildings, and are, therefore, seen from a distance, this necessity of decided features becomes still more obvious. But, though the method of Sir Charles Bell may afford elementary and general rules for giving to the human features certain casts of expression, it leaves a great deal to the imagination and taste, in the achievement of Ideal perfection.

Dr. Hutcheson's treatise on our Ideas of Beauty and Virtue, contains some very excellent remarks on beauty

as applied to the human features. He goes beyond the usually admitted facts of the necessity of regularity of form and proportion, and establishes a higher principle of beauty in those characters and expressions which are discovered in the airs of the countenances, in the same manner as he founds ugliness, not merely on deformity and disproportion, but on such marks as indicate dullness, vacancy, haughtiness, and the like characteristics.

The influence which the immediate connexion between the forms of the features, and internal sentiment, has on our impressions of beauty, is, I think, forcibly exemplified by the circumstance, that all features which, from their defective conformation, afford but a confused image of that which they are expected to express, or whose blemishes and imperfections are opposed to its open manifestation on the countenance, strike somewhat painfully upon every fresh observer. To him, more particularly, such features fulfil but imperfectly their intended office: but, with increased familiarity and acquaintance, such marks as contribute to the agreeable expression of any particular countenance, come foremost, and the influence of those which have a contrary tendency diminishes; slight deformities are, by degrees, regarded as strangers to the part which the muscles of expression have to perform; their presence is, at last, almost overlooked; and, unless to a mind bent on discovering that kind of beauty which is dependent on regularity, they nearly cease to be causes of its privation.

Hutcheson admits that we derive pleasure from the signs which indicate the amiable qualities, even when expressed in countenances wanting in regularity and

beauty. But these circumstances, having so much influence on the enjoyments of social life, cease to apply in the selection of that kind of beauty which constitutes the Ideal. Art has not yet attained that degree of perfection, which, in the research after the more tender and delicate expressions of the countenance, might enable it to dispense with all the advantages which result from perfect regularity of form, and the other admitted principles of beauty. This could alone be expected to be successfully accomplished, in the present stage of art, in family subjects. The research of the beautiful as applied to subjects of a classical and elevated character, avails itself but with restrictions, of the social and familiar affections of society, as it rejects altogether, the arbitrary decisions of fashion, and the conventional decrees of the drawing-room. Familiarity and social intercourse, by causing an endearment for those qualities of others which adapt themselves to the peculiar dispositions of individual persons, give rise to certain confined circles in which these qualities are especially valued. They are not equally appreciated by men in general; and their indication in the airs of the countenance could not, therefore, suit the purposes of an art, the object of which ought to be invariably to generalize, that is to say, to seek out pleasing expressions in forms in which they may be universally understood.

Doubtless the kind of feeling which guides society, at the present time, in its appreciation of the perfect in art, is considerably opposed to that which, at the Stadium, or the combat of the Cistus, assigned the highest personal merit to agility and to muscular

strength. Even the prize which was carried off by beauty itself, must, if we consider the prevailing taste, at these national solemnities, for ostentation and show, have been bestowed on forms, which, although full of symmetry, possessed very imperfectly, that aptitude for soft and tender expressions, which, in the present state of society, most effectually challenges sympathy and interest. Even the beauty of the Grecian marbles, which was originally derived from these and other similar sources, would, doubtless, appear tame and formal, if (as in the works of modern art) it were presented to us, unembellished by the association of the most interesting records of history, and of the prodigious and admirable strides which marked the early attempts of sculpture and painting in Europe.

The question, therefore, presents itself: To what extent, and by what means, should modern and Christian art, substitute the marks of emotion and sentiment, to that coarser and more formal expression of beauty, which, as in the productions of the ancients, is chiefly the result of a strict adherence to proportion and symmetry? In that kind of Ideal which adapts itself to the present age, the perfect symmetry of muscular form no longer claims the degree of attention which it did formerly; and even the marks of intelligence and vivacity, however essential, might, perhaps, sooner be dispensed with, than the so affecting expression of tenderness and benevolence, the deficiency of which, in the female features, would at first seem to be almost equivalent to a want of beauty. The expression which is best substituted for the marks of high mental attainments, is that

of modesty; for this virtue, presented to us in those circumstances of life in which it is rendered most engaging, contains an intelligence, discernment, and fortitude, peculiar to itself. Through it, the smile acquires grace by its sincerity, and seems to beam with a world of innocent delight; whilst the slightest marks of expression acquire a worth and interest which they do not possess under any other circumstances. Thus are those traces of superior mental endowments, which, in masculine features, especially in mature age, are so essential to the expression of the human countenance, in a great measure supplanted, in youth, especially in the female sex, by a quality, the indications of which, are most fitted to add grace and dignity to the gentler emanations of art.

Reverting, once more, to the question of the necessity of regular forms. It is evident that there are features, as in the models which are selected from the multitude, which are not only regular, but considered to be perfectly beautiful, without manifesting any clear or decided expression of those delicate sentiments and emotions, of which Hutcheson was the first to point out the merits. Are such features as these amenable to the uses of art, in the production of the Ideal? No doubt, it may here gather much with regard to those principles of form and colour which are necessary to the production of beautiful features. In availing itself of these principles of beauty, art copies but the intention of nature to produce perfection; and though its realization may have been partially thwarted, the envelope may retain the print of all those graces, of which a more careful education might

have brought forth the riper fruits. But, however much may be derived from these sources, as to ideality of form and colour, they can be expected to yield, as far as expression is concerned, neither chasteness nor depth.

Again, can inferiority of station supply us with those models of beauty, which are marked by delicacy and refinement of expression? or should they be sought for in those ranks only, where the tender plant has been reared up with all the care and luxury which would render it, in its maturity, of a perfect though delicate organization? I think it would be found that, should lowness, or, rather, humbleness, of station, influence the expression of that which is refined, delicate, or noble, we should rightly trace such results less to a condition fraught with hardships and discomforts, than to those meaner associations, either of intercourse or of occupation, which, in such stations of life, are more difficult to avoid; since we find that the expression which is enhanced and perfected by cultivation, and by the contemplation of elevated aims and purposes, is not in the least diminished and tarnished by exposure to climate, to weather, and even to those inconveniences and discomforts which may occasionally bring those subjected to them into the humble condition of persons brought up in rustic life. The complexion may, perhaps, be impaired in its delicacy; but expression would, probably, gain in variety and depth, by this subjection to vicissitudes of all kinds.

Since expression may impart to the Ideal of beauty, a charm which it could never obtain from an union of parts perfect from their regularity only, how do we

account for that perfection which is required in the regularity and developement of those parts which are not essential to expression, and which seem to be entirely disconnected with it? For instance, the ear and the nose have, like the eye and the mouth, uses very evident in reference to the wants of the possessor, but they have not, like the eye and the mouth, in addition to these uses, any evident purpose in as far as expression is concerned. Why, therefore, should the perfection of these parts be so necessary, as it undoubtedly is, in order that expression itself be complete and satisfactory? This circumstance appears to be one of those which strongly prove, that it is the imagination which is chiefly engaged by a pleasing expression, or by the air of beauty, diffused in the countenance. When that lively and pleasing expression, and that air of beauty, are perceived, it is, almost invariably, with the accompaniment of those parts, in a condition more or less perfect, which are not necessary to expression. Whenever these expressions, and these airs of countenance, reoccur in other features, the imagination is alive to their influence; but it would not be so, if any deformity, though unconcerned in the expression, were to obtrude itself: and such is our habit of seeing the perfection or completeness of those parts which are inactive in the production of expression, associated with the excellence of those on which it depends, that any imperfection or blemish in the structure of the former, would immediately operate unfavourably on the imagination, and destroy our relish and admiration for the countenance to which they belong.

That these parts are not necessary to expression, is shown by the circumstance that, when they are hidden by the hair, the dress, or any other object, the expression remains the same. Should they be deficient, or partly wanting, the omission would at once be felt, and a disagreeable effect would result; but mere concealment leaves the imagination active, which, without effort, completes the whole. This is not the case with respect to the parts which have the greatest share in expression; for if the eyes, or the mouth, were even accidentally concealed, it would be found very difficult to complete the expression or the graceful air of the countenance. The eyebrows, though of no other apparent use than as ornaments, contribute so far to expression, that their deficiency would be greatly destructive of beauty.

Another kind of inquiry, of which the solution cannot be indifferent to the career and prospects of art, is, whether those decisions of taste which are influenced by impassionate admiration, are admissible as a means of obtaining the Ideal in beauty of form,—whether, in fact, the objects of its choice be of the domain of art in general, and not confined to individuals. Guido, Carlo Dolci, Murillo, Greuse, and Reynolds, have all succeeded in producing the loveliest expression of virginal innocence; an expression which, in none of these cases, we can conceive to be resulting only from a thorough knowledge of the rules of proportion, or from a study of nature made according to any of the admitted principles of art. Could we suppose these men, each eminent in his sphere, to meet before each other's works, they would

not, I fancy, whatever might be the influence of previous cultivation and experience, be rendered sensible to the perfection of these productions, by studies which, in each of their respective countries, would be found materially to differ: but, on witnessing their enthusiasm suddenly kindled, as though one great master had lighted up the energy of another, by the flame of his own genius, we should not, I think, hesitate to conclude, that the sentiment of the beautiful, which partakes of the enthusiasm of passion, is general and comprehensive, and that its language is alike understood, in all periods, and in all countries. Vast and comprehensive, indeed, is this unity of sympathy and love; yet equally unbounded is that variety of form, which, although founded on one prevailing emotion, gives an unlimited extent to the conceptions of art.

If those expressions of the features possess no ordinary sweetness, which, at the same time that they promise all the endearments of friendship, draw a veil over its anxieties, who would not be sensible to those inspired productions of art, the enchantments of which call at once to mind these blissful dreams? And, since the enthusiasm of emotion greatly exceeds the reality of any hoped-for pleasure, it may become the means of imparting to form, in vigorous characters, an ideal and angelic excellence which could never be obtained by the most careful academic studies. Moreover, a deep-felt impression of the beautiful, as derived from her choicest models in nature and art, alone converts into living images, those graceful and fugitive

emanations of the fancy, which are borrowed from these sources. The impression thus grafted on the mind, remains unshaken by the disturbing influences of a long and arduous work, and, after relentless efforts, is brought before you, as a chastened reality, with marvellous life and energy.

PART II.

SUBJECTS PRACTICALLY CONNECTED WITH IMITATION IN PAINTING.

COMPOSITION.

GENERAL RULES.

THE history of art, or, rather, the comparison of its productions at different periods, shows that very little is to be gained by rules of Composition; and there would be more usefulness in teaching how to select amongst those which have been given centuries ago, than in advancing new ones.

Sound principles of taste appear to have been already established, in the flourishing times of Greece; and the Latin authors have likewise given excellent rules, applicable to poetry, and, in a general way, to painting. These rules were of the simplest nature, because those which are most essential in practice, are of themselves obvious; and the writers of antiquity had sense enough to perceive, that taste is rather hampered, than assisted,

by prescriptive laws, and by an indecorous intrusion into its sanctuary. Moreover, they had not been driven, in order to avoid repeating hackneyed maxims, to seek out insignificant and remote ones, which, if no greater evil is done, become very detrimental to the elementary truths, by acquiring undue consideration and importance. But the very simplicity of the primitive rules of taste, seems, in later times, to have opened the way to doubts as to their adequacy; for we find, either in modern authors, new maxims asserted, or, in modern artists, new principles acted upon, which, being more elaborate, and, in appearance, more profound and important than the simple truths which had been so long familiar, have exercised a considerable influence, and, in some schools, acquired even the ascendancy over sounder principles of art. This mistake should not, however, be ascribed wholly to the intentional aim of the present schools of painting, but, in a great measure, to their position; since the necessity of satisfying the world with something new, almost compels them to quit, sometimes, the path of their predecessors; and this they frequently prefer doing, even should it be more perilous, to the palmless course of following in the beaten track. A still more powerful inducement, is that of imposing a fashion, or a new style, on the public mind. But, beside the injury which the artist, who overlooks nature and the obvious rules of taste, does to art in general, by creating a host of imitators less scrupulous and still less successful than himself, he can scarcely look forward, however delightful may seem the expression of present applause, to the opinion of posterity.

To Aristotle we owe the elementary principles of unity of time, place, and action, prescribed by him chiefly to the drama, but which, in the historical painting, equally apply to the subject or event.* Several other simple, but equally necessary, truths, have been apparently borrowed from the principles enounced by the ancients, and applied to the art of painting by Du Fresnoy. Amongst these are, order in the arrangement, abstinence from all superfluous ornaments, and from episodes foreign to the subject, the avoidance of all lines and forms which meet end to end, without intervening objects or colours to prevent the jarring of these corresponding extremities, the necessity of keeping the principal figure in the action foremost, and conspicuous amongst the rest, and the defects which result from forced and ungraceful actions and positions, as well as from parallel lines and geometrical forms.†

The observance of this last rule presents considerable difficulty in historical paintings in which the naked figure is introduced, owing to the sudden angles which are presented by the joints of the limbs when in a bent

* It would appear from the following passage of Aristotle, quoted from the Rev. Thomas Twining's translation, that the Greek author intended to include works of art in the application of his principles of unity; "As, therefore, in other *mimetic arts*, one imitation is an imitation of one thing; so here, the fable, being an imitation of an action, should be an imitation of an action that is one and entire; the parts of it being so connected, that if any one of them be either transposed or taken away, the whole will be destroyed or changed: for whatever may be either retained or omitted, without making any sensible difference, is not, properly, a part." Mimetic art is considered by the translator to imply a work of art or picture.—See translation of Aristotle on Poetry, p. 81.

† See Du Fresnoy's "Art of Painting;" Dryden's translation, pp. 11, 15, 19, 25, 37.

position; and where several figures are introduced, the crossing of the limbs, and the repetition of the angles of the joints, produce a disagreeable effect, which frequently destroys the beauty of works, of high merit in other respects. Of this number may be mentioned the painting, by Raffaelle, of the Murder of the Innocents, now in the National Gallery. This defect is also striking, at first sight, in the painting of the Last Judgment, by Michael Angelo, in the Cappella Sistina; although with a longer inspection, it is rendered less apparent, as the attention is drawn off by the excellencies of the work, which gradually come out. These objections apply more to the paintings of the old masters than to those of the modern; partly from their more frequent use of figures from the life, partly from the sinking, which the lapse of time has occasioned, of the semi-tints into black, which frequently causes an immediate and harsh contrast, between the dark ground and the staring white limbs. This should be a warning to modern artists, to maintain transparency in the shadows, and to make great use of the half lights and semi-shades, which serve as a useful medium between the first, or strongest lights, and the darker colours.

The distribution of lights and shades, is a secret power, which the artist holds in reserve, and calls chiefly to his assistance when he has erred in judgment, or failed in the execution. It even enables him, by the great resources which it places at his command, to invent, and to ordain the outline of his subject, in apparent opposition to the rules of taste. In the landscape, it is a judicious diffusion of the lights and shades,

which counteracts the hardness resulting from the repetition of the marked outlines of mountains, rocks, houses, &c. Likewise in the historical picture, it is the skilful distribution of these lights and shadows, that chiefly assists, in overcoming the still more formidable difficulties, resulting from the similar forms and angular disposition of the limbs. Thus, should the means afforded by the use of draperies, as well as by the arrangement and grouping of the figures, prove insufficient to counteract every objection resulting from the repetition of similar forms, and from their awkward combinations; the resources which are furnished by partial shadows, should be had recourse to. By throwing some of the forms into half shadow, or by placing them at an aërial distance, they may be made to lose, in a great measure, their connexion with the more conspicuous and foremost parts of the composition; and reduplication of form, should it even exist, thus becomes scarcely felt. In the admirable painting of the death of Saint Jeronymo, by Domenichino, in the Vatican, the heads which incline over the dying saint would doubtless lose a great deal of their variety, without the shadows thrown partially over some of them.

Scenes in the open air, or in roomy apartments, afford greater advantages, with regard to light and shade, than those compositions in which all the personages are on the same plane, and brought out in relief on an opaque background. When space has been secured, all the resources which may result from foreshortening, and from partial concealment, with the concomitant circumstances of projected shadows, are entirely at the

artist's disposal. He likewise obtains greater facility for displaying variety in the action, as well as in the other marks of emotion and interest. This is not only desirable, from the additional grace and ease which it gives to the composition; but wherever the expression and general interest of the subject are deficient, the other objections above alluded to, such as the reduplication of similar parts and similar forms, obtrude themselves so much the more. The defects which result from a want of space, show themselves, perhaps, in the somewhat constrained position of San Girolamo, in the picture of the Holy Family, by Coreggio; whereas the movements of most of the other figures are graceful and easy, and the cheerful animation of their features, but imperfectly rendered in the annexed plate, appears, with the master's touch, almost to equal that of life.

As an instance of admirable grouping, in open space, and with a great number of figures, may be mentioned, the painting of St. John the Baptist by Giulio Romano. The groups, in this picture, are sufficiently distinct, to relieve the eye by the appearance of separate masses, and, at the same time, they are so connected by the arrangement, and by the same feeling and interest pervading the whole, that the perfect observance of unity of subject, place, and action, will strike every one. The artist has gained additional facilities for avoiding the repetition resulting from the similar forms of the limbs, by enveloping several of the figures in flowing draperies.

It may, at the first impression, appear unaccountable, to the persons who have read Mr. Burnet's very useful work on Composition, that, whereas an approach to

OF THE
BOMBAY
BRANCH
OF THE
ASIATIC

SAN GIROLAMO.

By Coreggio.

IN THE ACCADEMIA OF PARMA.

symmetry in the forms of the principal groups and objects, is, in general, considered a thing to be carefully avoided, the author and artist alluded to, appears to have adopted, to a certain extent, regular forms for Composition, in preference to others. But it appears to me, that the chief danger incurred by the author, is that of being mistaken as to his object in introducing regular shapes, such as the diagonal, lozenge, and circular, forms, to which he alludes in his work; for it is evident, by the explanations which follow, that he attaches very little importance to these forms in themselves, and that he employed them, chiefly, as a practical means of directing the attention of the student towards the general outline of the masses in Composition, the neglect of which, even in the pursuit of those more absorbing principles of excellence, which lie hidden in the emotions and actions of the figures, renders the work less perfect.

The student who seeks elegance in the exterior outline, either of inanimate objects, or of living beings, is apt to forget that the apparent forms of the masses depend less on these exterior outlines, than on the distribution of such parts as are illuminated, or which receive the full light: and any rules, which may serve to mark out especially the form and distribution of the principal masses of light, to show their influence in the picture, and to distinguish them from those boundary lines which are mere definitions of substance, and which often vanish into shade, may be very desirable. The elementary figures of geometry, afford some tangible means of instructing the student respecting the forms and arrange-

ment of the leading masses; and their great simplicity, and abstract nature, render them less objectionable than forms more complicated, or than such as are connected with useful purposes, and would, therefore, be likely to remind the observer of some object foreign to the subject. Any form, whether it be in the details of a picture, or in the masses, which may be easily construed into some strange imaginary object, and which, therefore, diverts the attention from the subject, is, doubtless, to be deprecated; and the artist and student equally strive to avoid these accidental coincidences of real and imaginary shapes.* Elegance and variety, combined with a simple and clear exposition, constitute their chief aim, in the economy of the subject, and the distribution of the parts.

* Whenever any such imaginary form is brought before the mind of the beholder, however sublime may be the intended subject, he inevitably takes the step which leads to the ridiculous. When I was shewn, at the Accademia at Venice, the much-admired picture by Tintoretto, called "Il Miracolo di San Marco," the first idea produced, was, that a very wonderful bird had appeared in the sky, at which the multitude beneath were anxiously gazing, in the hope and expectation of its very shortly falling to the ground. These representations of aërial flights, which so often form the subjects of the *chef d'œuvres* of the great Italian Masters, who were obliged to satisfy the superstitious taste of their time and country, never gave me real pleasure. Even the celebrated Assumption of the Virgin, by Titian, unfortunately brought to my mind the effect of a very interesting lady balancing herself on the tight-rope, with her arms extended; the little angels looking like inferior nymphs dancing round her. At last, I found that the only way to derive rational pleasure from such pictures, and to appreciate the powers of the artists, was, to resist the first tendency to the ridiculous, by forcing the attention away from that which was actually intended to form the chief attraction. Then, indeed, one might admire the skilful grouping of the multitude, their various expressions of fear, astonishment, awe, reverence, or devotion, the exquisite beauty and richness of the colours, so wonderfully blended and skilfully harmonized as they are in the Flight of St. Mark, though still more successfully so, in the Assumption of the Virgin, by the inimitable Titian.—*Mrs. H. Twining.*

Any geometrical or otherwise symmetrical forms, either in the distribution of the lights, or of the groups themselves, are defects, if sufficiently obvious to become noticed; but if the subject be so effectively borne out, as to engross the entire attention, and if its points of interest fill the mind of the observer, he will be less likely, than when its execution is ineffective, to take offence at any approach to geometrical figures, in the general forms of the composition. A certain degree of regularity, resulting from the concentration and grouping together of the parts, is, in all cases, greatly preferable to that kind of irregularity, which would result from the random scattering of objects over a large surface.

The union of dispersed groups by some common link, is one of the most necessary principles of Composition. In the centre of a small picture of the Assumption, by Franceschini, in the Palazzo Pallavicini, at Genoa, is a flying group of figures, of a lozenge shape, with one of its angles downwards. This symmetrical form of Composition is scarcely interrupted by the shadows in which some of the figures are placed, or by two little angels, standing, who connect the central group with the ground. Yet these slight artifices are so well managed, that the symmetry of the composition does not strike at first sight. It appears, on the contrary, exceedingly beautiful, from the graceful, but at the same time, successful efforts of the angels to bear up the Virgin. The connexion between the different groups of figures, has likewise been studiously maintained in the picture of the Assumption, by Titian, by small Putini, exquisitely painted, flying in the midway air.

IMPROPRIETY OF EXAGGERATED ACTION.

Leonardo da Vinci, although he recommends, in his treatise, that the figures which are engaged in stirring events should have all the impetuosity and fire in their motions and attitudes, which may be called for by animated action, nevertheless proportions the ardour displayed in their attitudes, to the subject which calls for it, as he himself shows, by a comparison between a man who hurls a javelin, and another represented in the less violent action of throwing a stone.* As far as regards practice in the arts of drawing and sculpture, the circumstances which are connected with action, differ considerably from those which influence expression. It will be allowed, that, with regard to expression in the human features, there is no difficulty in equalling, or even in exaggerating, those marks of emotion and character which depend on the distension or contraction of the muscles: but this is not exactly the case with respect to the actions of the limbs; for at the same time that all excess, in the apparent movements and actions of the limbs, is to be reproved, it must be remembered, that

* "A figure whose motions are not perfectly accommodate to the sentiment or passion it is supposed to have, shows its members to be in a state of rebellion, and to want that duty and allegiance which they owe to the mind. * * * The action of a figure must be so proper and peculiar to the subject, that it cannot possibly serve to signify any other thing, nor be used on any other occasion, than it is intended for."—*Da Vinci on Painting.* Senex's translation, p. 110.

the novice in the fine arts accomplishes what appears to him a great achievement, when he succeeds in disengaging the limbs of his figures from the stiffness and constraint which appear to cling to every first attempt. This question, therefore, whether it regard works executed in marble or with the pencil, must be, in a great measure, relative to the powers of execution of the artist, as it is to the general progress of art itself. He who is still diffident in his art, has to embolden himself, before he can attain the ease and gracefulness of nature; whereas the one who exercises complete mastery over his materials, and carries out without effort every preconceived design, may sometimes find it desirable to check his own ardour, and to regulate and govern the violence expressed in his subject. Canova might, it appears to me, have somewhat subdued the impetuosity expressed in the attitude of Theseus killing one of the Centaurs, a group which now decorates the Volksgarten at Vienna. Such a display of strength and exertion, against an enemy already overcome, does not agree with one's ideas of so mighty a hero. According to the prevalent impressions of a Theseus, less effort would have been required, even in the first struggle with his opponent. How much more successfully has Thorwaldsen given the expression of unsubdued courage, in the reposing attitude of the Lion of Lucerne, though wounded and dying! A few decided marks show what this noble creature must have been in his strength; and the imagination goes, perhaps, still further, assisted by the peculiar enchantments of the spot.* How much would the Saint John,

* The Lion here alluded to, is the monument erected by Thorwaldsen,

by Guido, in the Dulwich Gallery, have lost of its character of deep and earnest thought, if the limbs had not been kept in a position of ease, and expression left entirely to the features!

If great action of the limbs be desirable in order to give variety and interest to the muscular forms, it must be done by introducing a subject which calls for great bodily exertion, as in the Descent from the Cross, by Rubens; or, rather, in the painting of the same subject by Danieli di Volterra, in the Chiesa della Trinità del Monte, at Rome. An appearance of effort which is not called for, has been stigmatized, in all times, by men of taste, and is generally the mark of feebleness of invention. An example of propriety, in this respect, is afforded by the cartoon of the First Trial by Jury, by Mr. Cope. He has not given more action to the figures than the nature

near Lucerne, in commemoration of the brave and noble Swiss Guards who were slain in defending Louis XVI. and Marie Antoinette. The history of their admirable faithfulness is well known; and this monument recalls it vividly to the mind, filling one with sublime reflections; while the spot itself adds to these thoughts, impressions of the beautiful. I have not seen on the plain of Waterloo, nor inclosed in any cathedral, so touching and magnificent a monument, nor one which so well satisfies the spectator as to its durability. One feels that the noble Swiss martyrs are immortalized, as well as the artist who conceived this grand and appropriate design. Some magnificent cliffs have been selected, and, by cutting through them, their diagonal stratifications and varied tints are brought to bear on the effect of the wounded lion, which calmly reposes below, in an irregular cavity. The surrounding trees extend from the top to the bottom of the rocks on either side, inclosing the monument, which is roofed over by the pure sky, and giving it an air of romantic beauty and deep seclusion, in perfect accordance with its simple character. Honour and glory to the brave, the noble, the faithful guards, who, though overcome by numbers, were unsubdued in spirit, and fought to the last drop of their blood in defence of their royal master and mistress!—*Mrs. H. T.*

of the subject would justify; yet the interest which results from it, as well as from expression, is not wanting in any part of this fine composition, and has been most successfully attained in the features and attitude of the youthful accuser.

EQUILIBRIUM.

A very nice point, in connexion with the action of figures, is that of *balance*. Generally speaking, whatever be the attitude of the figure, such a distribution of the limbs, and other parts, as produces a perfect equipoise of the whole, is considered one of the first and necessary conditions of the art of grouping,—one, of which Leonardo strongly advocates the importance. But, with regard to the motion of progression, this perfect balance of the parts of a figure, appears to be subjected to restrictions, as the position of a man rapidly advancing, is that of a suspended fall. In the simple attitude of walking, however, even with a hasty step, it may be doubtful whether the greatest mass of the body inclines, at any moment, beyond the perpendicular, although it might require some effort to stop suddenly short. This difficulty of stopping abruptly, is due to the impulse which is acquired, rather than to a position of the body in which the centre of gravity is beyond the point of support; unless it be, perhaps, at the moment that one foot is held suspended in the air before the next step is taken—a position which is never represented, excepting in the running figure, either in sculpture or in painting. The position of the Diana à la

Biche, though indicating swift progress, is perfectly erect; and that of the Fighting Gladiator, who, apparently, is advancing toward the foe, is characterized by firmness. There are, however, in the gardens of the Tuileries, two running figures of Atalanta and Hippomenes (by Coustou, an artist of the eighteenth century), tastefully distributed in one of the parterres. In these graceful statues, the appearance of falling, in the attitude of the body, is, as far as I can remember, only prevented by the indication of rapid and successive movements of the inferior limbs. Independently of the mechanical difficulty of supporting the figure, considerable artistic skill must have been required; since, without the most perfect and characteristic signs of speed, in every attitude and movement, the result would have been a falling, and not a racing, figure.

ON THE SUPERNATURAL IN COMPOSITION.

I believe that the Supernatural belongs very little to the province of historical painting. Its analogy with poetry has, I apprehend, led, in many instances, to suppose that the capacity of art for compositions of this kind, is much greater than it really is. But it is especially with respect to those points which are most ideal and imaginative, that art chiefly differs from poetry. The latter, in fact, only suggests the subject, or traces it indistinctly with bright flashes here and there: whereas the sister art operates with positive materials; and it is to the distinct and forcible expression of ideas, resulting from this positive labour, that it chiefly owes its charm.

It would be mistaking its object, and throwing away its most valuable attribute, to dispossess it of this true, precise, and positive character, in comparison with the other productions of the imagination. The less perfect the work, as a composition or picture, the less it will be required to afford the exact image of those matter-of-fact forms which are familiar to us. A mere *sketch* may embody imaginary scenes and effects, without causing any surprise, or insinuating misgivings as to their propriety; whereas, the more perfect the work, the less suited it is for that exercise of the imagination, which selects its objects beyond the limits of nature. Hence we discern the true tendency of art. But although extraordinary or fairy scenes, do not strictly belong to its domain, might it not still be admitted that they may be sometimes employed to embellish it? Supposing this to be the case (and experience seems to show that it may be so), the course to be pursued is, in my mind, evident. Art will not, indeed, suffer such freaks of the imagination to intrude upon those parts of any work which are most essential and conspicuous, or which involve the greatest interest. They must be kept in the background, nearly unperceived, and only sufficiently apparent to denote the influence which any such supernatural signs exercise on the subject; that they may explain the tale, diversify its character, and thus add to its expression, but without detracting from that important attribute of the art of painting, which gives the appearance of substance. Mr. Townsend, in his painting of Miranda, in the "Tempest," exhibited in the year 1848 at the Royal Academy, has assigned to the supernatural its true

bounds, by keeping in the distance, and little conspicuous, the imaginary personages of Ariel and his attendants, which are necessary for the subject, but which, had they been obtruded upon the observer, would have destroyed its character of propriety.

The mythology of the Greeks partakes of the character of the fable, and is, consequently, much better adapted for the purposes of imitative art, than those fleeting and indefinable spirits and images which are described in the poetry of the more northern nations. Apollo, pursuing his luminous course above the clouds, surrounded by the Graces, and preceded by the personification of Aurora, has not proved too mysterious and supernatural a subject for the pencil of Guido Reni. However bold the fiction, its images have all substance, and belong, therefore, to the domain of art, as is rendered sufficiently evident by this matchless production of its kind, painted in fresco, on one of the ceilings in the Palazzo Rospigliosi, at Rome. Indeed, most of the fictions of the Greek and Latin poets, are such as the imagination may compass without any effort, and art as easily embody. Dædalus fastens the feathery wings to the shoulders of his son Icarus; and the marks of paternal solicitude to which this act, preceding their adventurous flight, gives rise, furnish the artist with a subject most fitted for inspiring feelings of tenderness and emotion. This is the moment chosen by Caravaggio, in a painting of this subject in the possession of Mr. Thomas Twining, of Twickenham. The Milanese painter has deemed it preferable to the rendering of the flight itself. By thus keeping out of sight the marvellous

of the tale, he has allowed its influence to prevail in full force on the imagination of the observer. In vain might we seek for anything so definite in the Saga and mythology of the Scandinavians; nor were it easy to embody in material pigment, the ghost, of which Ossian says,— "His robes are of the clouds of the hill," "His eyes are two decaying flames," and "The stars dim-twinkled through his form."

COMPOSITION IN THE LANDSCAPE.

In the landscape, the limits of plausible departure from the truth of nature, cannot be exactly traced by principle. They must depend on the style and character of the landscape; on its being a fancy piece, a composition, or the transcript of a scene in nature. They must also depend on the taste of the artist, and his power of carrying out ably, the suggestions of his fancy. The immense difference which exists, in this respect, between the copy of a scene in nature, and a work of the imagination, is obvious; and it is likewise evident, that there are various stages between the faithful transcript and the fancy piece, in which a greater or less degree of caprice and *abandon* is compatible with the subject: but with respect to the amount of the digression from nature, allowable in these various styles, it would be difficult to find so much as two opinions perfectly agreed. I shall only consider, here, what impressions are likely to result from certain combinations of the fanciful with truth, and let the opinion of

others decide the cases in which their union is commendable.

I will begin by alluding to slight deviations from truth of representation. There are, I believe, very few artists, who, in what they might call a faithful representation of nature, would not consider themselves justified in making such alterations in the foreground, as they might deem necessary to show off to advantage the principal objects in the scene, and add to its effect. The plausible reasons for so doing are, that time brings on changes in the comparatively minor objects which constitute the foreground, and also, that the artist may choose a different spot, or *point de vue*, without materially changing the general character of the scene. He may even, before beginning his sketch, alter, by physical strength, the arrangement of some of the minor objects immediately around him, and thus partly form for himself, such a distribution as is best adapted to the character of the landscape. These circumstances render the mind so easily reconcileable to any modifications of the realities of nature, in the foregrounds of paintings, that a recourse to such changes is not usually considered to detract from the graphic truth of the general prospect.

Let us now proceed to those parts of the landscape which fill up the middle planes and distance. They are formed of houses, trees, castles, bridges, rocks, mountains, &c. It cannot be doubted, that any departure from correct form, in the most conspicuous of these objects, or their omission, will tend to diminish the general and characteristic resemblance of the picture to

any given scene: and is it not evident that any such want of resemblance, or departure from the truth, in imitations of nature, generally lessens the satisfaction and interest, which every one who has travelled, or busied himself with picturesque beauties, experiences, in beholding the likeness of any chosen spot? Is it not again certain, that accurate knowledge concerning the characteristic features of nature, as well in her general outlines, as in her minute particulars, becomes more and more prevalent at the present time? That the sciences of Geology and Botany both offer inducements to more particularizing and comparing surveys, than were formerly thought of? And is this not considered a desirable result, a step calculated for the advancement of art? On the other hand, if we were to recommend a departure from nature, not only with regard to her particulars, but respecting her general and characteristic features, such as the elevation of the mountains, the width of the rivers, and the style of the buildings, we should be pursuing an opposite course; unlearning what we have learned, and adopting in our imitations, a plan which would call forth such expressions as "thereabout," "something like," and similar confused and indefinite terms.

It may be objected that the character of a country does not result from the portraiture of individual spots contained in it, and that the artist may copy its features, —its stratifications, its vegetation, and the style of its buildings,—without strictly representing any individual rocks, trees, or houses. But this plan, which might answer very well for a class of compositions to which I

shall presently allude (not claiming to be portraits of any particular spots in nature), must fail if it pretend to point out the place that we wish to be reminded of; and, whilst attending, in the landscape portrait, to characteristic minutiæ, if we neglect the most obvious indications of locality, we have the appearance of becoming over-wise in one respect, to betray but the greater ignorance in another; and I think we should find, that by entirely neglecting the marks which are expressive of locality, in works which claim to be representations of particular spots, we should soon allow our ideas and impressions to be involved in a degree of confusion, as much opposed to the true enjoyment of nature and advantage of art, as would result from the neglect of general characters and distinctions.

Ought we, for fear of falling into this kind of ignorance, proceed to trace with precision, every minute particular which marks the spot, and, with the patience of Canaletti, count the bricks and tiles? The dullness and insipidity of the Daguerreotype prove, that we should not be rendered so alive to the resemblance of a place by this mechanical imitation, as by one which would rather have effect and character for its aim.* What are, then, the suitable limits to the imitation of the scenery of nature? Can we go something beyond a lively but characteristic expression of sites or places? Can art improve them,

* Mons. Töpffer has most satisfactorily shewn, by a series of very ingenious and acute observations contained in a pamphlet entitled "Réflexions d'un Peintre Genevois," that the Daguerreotype fails to convey impressions of resemblance so forcibly as a good work of art will do, and has thus proved that it could not become a substitute for paintings.

render them more palatable, and cause them to please us more than such scenes in nature generally do, or might do under the most favourable circumstances? The decision of these points, must, I think, be left chiefly to the taste and judgment of individuals. It is evident that nature must always be preferred in her most fitting apparel; but it is likewise evident, that she herself is, at times, so much disguised by the dress put on, that her very features seem altered. The artist who knows the cause and sources of these disguises, labours to the greatest advantage. He improves and embellishes his scene, without departing from truth, and without maiming any of those permanent facts and particulars, the recognition of which is always attended with pleasure. The resources which are offered by the various aspects and seasons in which nature is beheld, are immense. Form itself depends, in a great measure, on the position selected by the observer, on the direction of the lights, and the transparency or mistiness of the atmosphere. From such causes as these, the mountains may become more elevated, the plains more vast; depth, space, and distance, may be increased; and the artist, who thus adds to the grandeur or beauty of a subject, by availing himself of means borrowed from nature herself, instead of tantalizing the mind, and engendering an admiration based, in a great measure, on ignorance in matters of art, instructs, at the same time that he diverts, his admirers.

A frequent cause of difficulty, in taking views from nature, arises from the exigency of taste in matters of art. So much is demanded of her supposed perfectibility, that nature can never be copied in all her parts indiscri-

minately: additions and alterations are required. The artist, therefore, is frequently compelled to select some leading object from the living scene; the accessories he invents, or arranges according to his fancy, distributing them so as to shew, in the most graceful and effectual manner, the more prominent objects which he has borrowed from nature.

Another plan, is that of assembling together materials furnished by different localities; a method which may produce a very good patched-up composition, after the fashion of an Italian villa or Dutch garden in an English pleasure-ground, but having neither the merit of an invention, nor the interest of a portrait of nature. These difficulties may be obviated, and the interest which results from the association of place and climate, be partly maintained, by composing landscapes possessing the most characteristic marks of any particular country, but without embodying any individual object existing there. Thus is avoided the necessity of mutilating nature, whenever a portion of the objects does not correspond, in interest and beauty, with the remainder. Some countries, though sterile in picturesque beauty, are remarkable for certain general and characteristic features, and it may then be desirable not to select any particular spot for the subject, nor to adhere closely to the unpicturesque truth. But the artist who makes it his object to secure the character of a place, and not its likeness, has the form and arrangement entirely to himself; and he is able to attend to the demands of art, without departing from truth in the general aspect of the scene.

In these different methods of appropriating the beau-

ties of natural scenery to the purposes of art, from the most faithful portrait, to the most generalizing expression, the judgment and experience of the artist will point out the degree of departure from nature, which is consistent with his plan. He will, I think, be aware, that in proportion as he endeavours to captivate the imagination with brilliancy of effect, and to excite the sympathies of emotion, he must be sparing of minute indications of character. The imagination is hampered by confined and exact study; and, in the thoughtful mood, physical particulars and distinctions are willingly overlooked.

In subjects of mere invention, the skill and power of the artist, alone, prescribe bounds to the imagination. The boldest flights of his fancy, may remain uncontrolled, provided the deceits of an imaginary creation be so artfully contrived, that they do not appear to contradict the positive truths of nature; and, indeed, in works of a half spiritual, half-human, character, it is a matter of no very great difficulty, to elude the principles of fitness and proportion which govern the world subjected to the senses. But the chief merit of compositions of this kind, shows itself, when effects, the most extraordinary in appearance, are associated, in a probable and natural manner, with memorable events recorded by history, and therefore claiming a deep share of interest. In this kind of Composition, Mr. Martin has had great success; and he has, in my opinion, made a great step, from the point at which the ancient masters left the treatment of sacred subjects of an imaginative or mysterious character. In many of these old paintings, angels and demons have been introduced, with the forms

of the flesh, without any appeal being made to the imagination, in the effect or style of the composition. The difference between an imaginative or sentimental style, in subjects of this kind, and mere mechanical fiction, would be forcibly shown, by a comparison of the paintings of the modern artist above alluded to, with the ludicrous appearance of the temptations of Saint Antonio, by Peter Petersz Brueghel. A profound knowledge of the harmony and natural arrangement of colours, united to expertness in their use, and to the liveliest fancy, is doubtless necessary, for the realization of these fantastic and imaginary scenes, in an engaging form. But in addition to these, a knowledge of the most unusual and singular phenomena of nature, may be desirable, such as the characteristic appearances of the sun and moon in connexion with Parhelia and Halos, of the Aurora Borealis, Mirage, Shooting Stars, &c. These rare, and sometimes inexplicable, appearances of the natural world, always impress the mind with mysterious astonishment and admiration; and the judicious application of such signs to works of art, cannot fail to exercise a more powerful influence on the observer, than the introduction of mere conventional and imaginary effects, having no apparent connexion with the phenomena of nature.

Forms of Composition which are adapted for Landscapes.—The elegance of a Landscape Composition, requires that there should be an opening, or a depression of the general outline, in the centre, or towards the side, of the picture;—in the centre is perhaps most graceful. This form is sometimes departed from, in bold compo-

sitions, where the extraordinary character of the scenery suffices in itself to engage the attention: the imagination, which is enraptured with the sublimity of the objects, may be made, for a time, to forget its wonted longing for freedom. It is, however, proceeding but conformably to nature, to leave a space, more or less open, in the centre of a landscape, and to direct the attention towards that point. In choosing the spot for viewing a prospect, we naturally endeavour to place ourselves in a convenient position; or in such a manner that we may discover before us, either a great number of objects, or a small number of striking ones; to effect both which purposes, space is required. Whether this be supplied by the opening of a valley, of an avenue, or of a street, or by any other such means, the progressive diminution of the various objects which fill up the scene, towards its centre or most interesting part, tends to concentrate the sight on that point; so that the plan of leaving a central opening in composed landscapes, is not altogether an artificial one. But art, taking the hint from nature, employs additional means for concentrating the attractions of the landscape towards its centre. It is there that the principal light is diffused, and that the most interesting objects are assembled; it is pointed out, more or less, by the convergence of the perspective forms, by the buildings, roads, rivers, &c., which recede towards the interior of the scene, and distract very much if they turn off abruptly by the side of the picture, as do, in general, all lines which converge, in a conspicuous manner, towards a point without its boundaries.

There seems to be much difference of opinion, as to

whether or not objects, such as trees, or a light foliage, rising in or near the centre of the picture, break too much, the distant perspective, and disturb its repose. Claude has not always abstained from thus intercepting, with a group of trees, the faint line of distant objects, and the expanse of a bright sky. Salvator Rosa cuts boldly into distant forms, with shagged trunks and interwoven branches. Many other instances may be mentioned; but, in most cases, the plan is adopted as an additional means of producing variety, with a partial sacrifice of elegance. The most perfect composition is doubtless that, where, as in Claude's Molino, the view of a receding distance, near the centre of the picture, remains unobstructed; but it must be acknowledged, that this arrangement is not without its dangers of formality; and few examples contrast better, than those of elegance, nearly bordering on affectation, on the one hand, and of ease, almost approaching to negligence, on the other, which are afforded by the landscapes of Claude and Both.

The objections to the introduction of a central group, increase with its proximity and size. When it is massive and opaque, it divides the picture into two parts, which has a very bad effect. If it be light and transparent, and allow the eye to penetrate beyond, through spared openings, the objection is considerably lessened, more especially if the form and connexion of the distant objects be well kept up, through the intervening apertures. Although the eye be partly obstructed, the fancy is not; it connects the forms, where they are broken, and completes the scene where

any portion is wanting. Thus, the continuity of the remoter objects, and the interest afforded by them, predominate, notwithstanding the partial interposition of nearer ones. In a small picture by Mr. Cooke, the distant form of Mount St. Angelo, on the Cape of Sorrento, is perceived through the meshes of a net, suspended at the entrance of a cave, in the Island of Capri; and in another painting by the same artist, the outline of the Rock of Gibraltar, appears through the intervals of a flight of birds. In both cases, the distant scene scarcely appears interrupted, nor is breadth diminished; for this necessary principle in art, depends much less on the unbroken continuity of material form, than on the impression of extent itself. In like manner, littleness does not result from the breaking up of any large form, unless the idea of its continuity and vastness be destroyed.

If it be intended to break the distance with an intervening object, it may be well to avoid making any disposition to this effect, during the progress of the work, lest the projected arrangements in the nearer parts, should interfere with the simplicity and entireness of the more distant. The forms of the background should be carried out, in as complete and perfect a manner, as if they were wholly to be seen.

Forms of Landscape Composition adopted by the Old Masters.—I will conclude this subject with a few remarks on the examples of landscape composition which have been left us by our predecessors in art. The landscape paintings of the Italian and Flemish schools, both present composition under two distinct

forms. The one depends chiefly on nature, the beauties of which it compiles; while the other disdains to borrow from any real scene, and, if we may judge by Salvator Rosa, seems to be the gift of an enthusiastic and highly excitable mind, fed in early days with scenes of a romantic character, whose mingled images present themselves, at certain moments, to the painter, divested of their original form and connection, with the vivacity of inspirations. This exuberance of a mind overflowing with picturesque beauty, materialized on the board or canvas, is characterized by the simplicity and ease of primitive thought. The facility and boldness which are manifested in Salvator Rosa's compositions, are, doubtless, owing to his versatile genius, combined with the circumstance that his early days were spent in travels through the most romantic districts of Italy. The landscapes of Gaspard Poussin, appear, also, to have been the creations of a fertile imagination, enriched with remembrances, as well as with copies, from nature, and bearing, every-where, the marks of that pure and classical taste, of which the sentiment appears to have, in later times, died away. Amongst the Flemings, John Both unites variety and ease, in a manner to prove that his compositions, if derived chiefly from the sketch-book, were partly due to the versatility of his genius; and it seems probable, that Berghem's simple but elegant compositions, and John Brueghel's fantastic, but somewhat crowded and monotonous scenes, were principally derived from the stores of the mind.

Amongst the more recent landscape-painters, Wilson, almost alone, has maintained the classical composition,

in the elevation of the style. In France, Joseph Vernet has preserved this character in some of his compositions, though he appears to have aimed less designedly at the classical style, than his English contemporary and friend, Wilson. The rules for composition established by the Institute of the Fine Arts at Paris, especially for the pictures exhibited in competition for prizes, have had some influence in preserving the classical or historical landscape, in France, from the complete neglect which it has met with in this country. With respect to the cause of this falling off, it may be remarked that, at the period of the revival of the fine arts in Italy, landscapes, as well as historical pictures, were doubtless looked upon with mingled curiosity and surprise, and the merit due to novelty, almost equalled, in the minds of the beholders, that of the conception and execution. The amazement caused by the first appearance of these productions, was succeeded, in after times, by the reverence which is paid to the relic. The name of the great master from whose touch they emanated, and the vicissitudes from which they had escaped, rendered them objects too sacred to be familiarly dealt with. Opinion still upheld their excellence, and the interest which they afforded remained undiminished. These impressions have given place, with respect to modern art, to more calm and scrutinizing examinations. Consequently, modern artists have had recourse to nature, which is unfailing in producing a considerable amount of pleasure, although it may not give rise to that excessive admiration and delight, which sometimes results from works of the imagination.

EXPRESSION.

WITH REFERENCE TO THE FIGURE.

Although the limits between Expression and that kind of excellence which is designated by the term Beauty, are uncertain and undefined in the human features (since beauty itself is based on the *expression* of every engaging quality); the term Expression applies more particularly to those modifications of the features, which, independently of permanent form, are associated, either with the sudden impulses and emotions, or with the habitual modes of thinking, of individuals.

The expression, therefore, which concerns the painter of the figure, is of two kinds. The one should have for its object the most habitual, and at the same time the most agreeable, manifestation of thought, of which any given features are susceptible; and this is one of the chief aims of the portrait. The other consists in the lively indication, on the countenance, of the interest and concern which are awakened by external causes, either present or remote; and this last is the kind of expression which chiefly constitutes the interest and merit of historical paintings. A pleasing expression, though it, perhaps, may be more successful than others, is here not so necessary as in the portrait, since the interest is that which is awakened by the event, and not, as in the former, by an air of contentment, or by an engaging demeanour.

The expression which belongs to historical subjects, is either resulting from emotions too deep and sudden to admit of speech, or is derived from the very acts and gestures which accompany the extemporaneous and energetic utterance of words. In nature, this kind of expression serves only to give additional emphasis to language; it never becomes a substitute. This is shown by the entirely different nature of the action used in the pantomime, the mimicry of which is not borrowed from the gestures which generally accompany energetic speech, but is conventional, and adapted for acting on the imagination.

In subjects of art, the circumstances and character of the personages are, in general, so well known, that the signs which are used to express their emotions are at once understood, and the conformity of the expression to the thoughts entertained, or to the words uttered, is immediately felt. But sometimes, the subject, without being a notorious one, explains itself, like the scene of a drama or comedy taken from common life. There is here no labelling of costume to say, "This is Macbeth, Richard the Third, or Falstaff." The characters expressed are rather those of a class than of distinguished individuals; but the expression is still, such as the event would most naturally produce, according to the dispositions of the various personages respectively; and the subject becomes equally manifest, by the true and natural concurrence of the emotions, airs, and gestures, with the leading incidents.

That kind of expression which is adjusted to our impressions of illustrious personages in history, belongs

to the highest department of art, and has formed the chief aim of the old Italian masters; whilst expression connected with unknown individuals, merely denoting character, has generally been the favourite theme of the Dutch schools.

An expression which is not in accordance with the feelings most natural to each individual in his respective situation, is a fault offensive to every one. In a painting of the Deposition from the Cross, by Coreggio, in the Gallery of Parma, the female figure supporting the fainting Mary, shows on her lips, indications of a smile, which becomes repulsive from its direct opposition to the affecting event; and in a picture of Christ taken in the Garden, by Lionello Spada, in the same gallery, this want of relation between the expression of the countenances, and the circumstances of the picture, is still more strikingly offensive. In the picture of Coriolanus, by Vandyck, in the Palazzo Pallavicini at Genoa, the figure of Veturia is another instance of expression having no relation to the incident. Though well painted, it is a blank in the picture, and has the appearance of a portrait.

Unity of expression is the most indispensable condition, wherever various figures and groups of figures are united together in one subject. This unity of expression is the most usual result of the unanimous interest afforded by the main incident, and it generally tends to produce a certain similarity in the looks and gestures of all: but unity of expression and interest do not always appear to correspond in the same subject; at times, unity of interest manifests itself, in very different,

and almost opposite, expressions of the countenances, as well as attitudes of the body. This arises from the diversity of the impressions which the same event gives rise to in various individuals. For instance, the attack of a wild beast on a child, might produce the marks of pity, terror, and the ardour of revenge, in the countenances and acts of different persons, according as a greater or less degree of interest in the fate of the child, and constitutional differences of frame and temperament, would render them diversely affected by the same event.

It may therefore be seen, that unity of expression may result, in the first place, from a conformity of interest, as well as of emotion, manifested by various individuals; or it may result from the various and dissimilar emotions, caused in different persons, by one principal focus of interest and excitement. It cannot proceed from a plurality of principles of interest, either in adjacent or in distant points of a composition. Accessory incidents need not, indeed, be entirely excluded; but in all pleasing and well-understood compositions, they are mere episodes or secondary occurrences, connected with, and dependent on, the leading idea. The Last Supper, by Leonardo da Vinci, affords a striking example of the diversity of expression which results from the different manner in which various persons are moved by one event.

Raffaelle's "Transfiguration" is a most extraordinary exception to the principle of unity of expression. This picture, however, involves the question of unity of subject; a point far more delicate than unity of expression, as far as Raffaelle's judgment is concerned. In a picture

by Pietro da Cortona, in the Gallery of the Louvre, the subject of which is a sacrifice for the reconciliation of Jacob and Esau, this, the leading event, is represented by small figures in the background, whilst figures of inferior interest, and having but a small share in the action, are prominent in the foreground. The inconsistency of such a composition is evident. This fault is, however, redeemed by great beauties in the colouring.

Whenever the expression of the features, and action of the body, instead of being directed to the point of deepest interest, appear to refer chiefly to some less important circumstance, the composition becomes wanting in grace. In a picture of the Baptism of our Saviour, by Paris Bordone, (formerly attributed to Giulio Romano), in the Pinacoteca of Milan, the attention is drawn to the effort made by St. John to maintain himself in a convenient situation for pouring water on the head of the Saviour, and not, by any means, to the religious emotion which one would wish to see impressed in every feature and action of the saint on such an occasion. There are other pictures of the same subject, in the galleries of Italy, in which the efforts made by St. John, to reach a suitable elevation for performing the ceremony of baptism, are more conspicuous than his pious humility.

There are several instances, in the galleries of Bologna and Parma, where expression is greatly heightened by the beauty, refinement, and delicacy, of the countenances. It would appear, from these examples, that expression, in many cases, is to be obtained rather by a judicious selection of features appropriate to the

subject, than by an attempt to mark the characteristic signs of emotion on features coarse and insignificant, or taken indiscriminately. This applies chiefly to the female features; but even in men, where great dignity, or the expression of that extreme benevolence which should be characteristic of divine subjects, is required, coarseness of features suffices to defeat the object. The common features of a San Francesco, by Domenichino, in the Palazzo Zambeccari at Bologna, though not out of place in a head which one is inclined to associate with that of a Franciscan monk, would appear utterly wanting in dignity in the head of our Saviour, which at first sight appears to be the subject of this painting. In the sacrifice of Isaac, in the Pinacoteca of Milan, Jordaens has given common, and almost clownish, features, to the angel sent to Abraham, instead of the seraphic beauty of a heavenly being. The features are totally devoid of expression, and even had they possessed the suitable indications of emotion, expression, associated with the coarse forms adopted by the artist, would probably still have remained very imperfect.

I have already alluded to the principles advanced by Sir Charles Bell. He founds his interesting analysis of expression partly on a comparison, formed by antithesis, between its characteristic signs, in the various wild animals, and in the human features; but principally on anatomical research respecting the office performed by each muscle of the face, when subjected to the varying influences of violent emotions. Either of these systems, carried out in practice, must lead to results far short of

those delicate expressions and engaging airs of the countenances, which, in works of art, captivate, at the same time that they stir up our feelings. Before, however, entering into the consideration of those coarser marks of expression which physiology points out, the author, by an allusion to the mild expression of the human features in sleep, shows that he is not insensible to those delicate external signs which are chiefly perceived when the mind is contemplated, as through a slender veil, beyond. But his observation "that expression shows itself in the sleeping features, because we judge them to be capable of it under other circumstances,"* seems almost to be going to the opposite extreme; for although the state of profound sleep would seem to imply the absence of all outward signs of mental activity, the features, nevertheless, disclose a particular state of the mind, quite distinct from any waking condition which we might suppose to be devoid of the usual indications of emotion or intellectual exertion. There can be no waking state of the countenance from which thought is entirely excluded without producing vacancy.

In the opinion of Winckelmann, all violent distortion of the features, in the paroxysm of emotion, is greatly detrimental to art. It disturbs, according to him, that beauty of form which should prevail, even in the violence of passion; and he disapproves of a treatise of Le Brun,

* Bell's "Anatomy and Philosophy of Expression, as connected with the Fine Arts," Essay 1, p. 19.

the examples of which have been taken from the exaggerated effects of passion.*

Intense and energetic expression may result, either from the exciting and moving nature of the event, or from the deep feeling and excitability of the beholders; but it will appear either constrained, unnatural, or ludicrous, when it seems resulting from a violent disturbance of the features, without due reference to the cause. The Massacre of the Innocents, by Guido, in the Accademia of Bologna, shows how much may be done, even in the most heart-rending subjects, without any excessive distortion of the features. The Lucretia in the Palazzo Zampieri at Bologna, the Allegrezza Fresco, also by Guido, and in the same palace, and elsewhere, various heads of Virgins and inspired Saints, are further examples of how much expression is associated with perfection in the moulding of the features. In a Madonna by Vandyck, in the gallery of Parma, a marked expression of placid joy is given, by the slightest motion of the lips and almost imperceptible alteration in the usual form of the countenance; yet the intended expression is perfect, and most charming. In the Madonna della Scodella, as well as in the San Girolamo, by Coreggio, both at Parma, there are beautiful instances of the advantage which results from the adaptation of the airs of the countenances to the subject, with very little effort. In the original picture, this is pleasingly exemplified by the countenance of the young angel near the figure of San

* See Winckelmann (Sur l'Art,) vol. i. p. 291. "Remarque sur l'Expression des Artistes Modernes."

Girolamo; but unfortunately for those who have not visited Parma, such expressions as these, cannot be rendered by any ordinary style of illustration. These light and delicate indications of feeling, as they remind the observer of expressions familiar to him, often appear more true to nature than the marks of passion which are accompanied by a greater distortion of the features. It would seem, in many instances, as though the artist contented himself with placing his figures in the most easy and graceful positions which are conformable to the subject, and allowed expression to follow, almost as a consequence, and not from a desire to produce effect, or a show of emotion.

In the Sainte Marguerite delivered from the Dragon, in the Louvre, the form and attitude of the youthful saint are marked by peculiar elegance: seraphic innocence prevails in her features. Thus, to her piety and innocence alone, we ascribe her victory over the dragon: had she been armed with strength instead of virtue, this beautiful dependence for her preservation on a Superior Power, would not have impressed itself on the observer. A small picture by Guido, in the collection of the Marquis of Westminster, represents the adoration of the Magi; and one of the shepherds, instead of gazing intently on the infant Christ, as might have been expected, has an absent and meditative look, indicating, perhaps, much more forcibly than would have done a more lively expression of interest, that amazement and deep inward emotion which stamp the impress of stupor on the features.

In few modern pictures has that sweetness of expres-

sion which befits graceful and delicate female features, even in deep melancholy, been more beautifully attained, than in the two paintings of the Sisters, from the poem "Bereavement," exhibited by Eddis, in the year 1848.

If exaggeration be sometimes allowable in the expression of the countenances, it appears to succeed best when its aim is to add to the animation of the features, and to impart a cheerful liveliness to the looks and attitudes, sometimes approaching to exultation. This kind of expression has been introduced, with a pleasing result, in several of the pictures of Holy Families by the old masters, especially by Coreggio; and one might perhaps add, by Michael Angelo, although it has taken, in this master, a somewhat different tendency. In a painting of the Holy Family, by Andrea del Sarto, in the Louvre, it strikes you at once, that there is something uncommon in the movements and airs of the heads; and it may be observed that character and expression are somewhat exaggerated in this picture, and that the artist, by a slight violation of truth to nature, has, without offending the taste, succeeded in affording to the observer the delight which results from livelier and more extended powers of the imagination.

By giving, however, a dramatic character to the expression and grouping of the figures, art falls from nature, to a pitch much lower than herself. This is the fault which does so great an injury to the paintings of the French master, David, and obliterates, in the eyes of many, the merit of his beautiful drawing and correct anatomy. Paul Veronese has, in general, avoided this defect, notwithstanding the tendency which large paint-

ings with a multitude of figures, (such as appear in his Suppers and other works) have, to produce this style; but, in his picture of the interview of Alexander with the family of Darius, at Venice, the appearance of the armed figures has something dramatical; and the picture of Mutius Scævola, by Guercino, in the Palazzo Pallavicini at Genoa, appears to derive a dramatic character from the armed costume of the personages. The appearance of figures in complete armour being now confined almost entirely to the stage, it is not surprising that their introduction into paintings should give a dramatic character to the subjects represented.

A successful attempt at deep expression, or intense thought, is seldom met with, where lively and showy colours have been employed in the drapery and other parts. The sleep of the infant, and the fond mother's care, are both strongly and beautifully expressed in the Madonna of Sasso Ferrato, in the Brera of Milan; but the anxious watchfulness of the mother's countenance would, probably, have been much more conspicuous, had it been surrounded by colours less obtrusive. A portrait of a Pittrice, by herself, of the Bolognese school, in the gallery of Milan, shows how much expression is enhanced by the perfect subordination of those lights and colours which do not form part of the features.

In the Marriage of St. Catherine, by Coreggio, at the Louvre, the bright colouring of the draperies does not, as frequently happens, appear to diminish the lively expression of the countenances; but, in this case, a certain cheerfulness pervades the subject, and a smile on most of the faces, harmonizes with the glowing effect of colour.

The picture of the Holy Family, by Murillo, in the National Gallery, exemplifies strikingly, the happy results of a cheerful and animated expression suitably combined with a rich and lively colouring.

A deep and rich colouring, without being glaring, does not appear, in general, to interfere with expression, as is proved by the admirable union of expression and richness of tone, in most of Titian's paintings. Guido has afforded a fine example of the possibility of this union, in his St. Peter and St. Paul, in the Pinacoteca at Milan.*

The mechanical difficulties of execution, with regard to expression in the human features, are much increased by the positive and decided effect, either for good or bad, of every touch, as the work proceeds. Before the whole draws near to its completion, and the relation between the different parts is thus established, each dash of the brush, though it may be justified in due time by the final result, frequently appears, for the moment, to act in direct opposition to its intended effect. Thus, the painter appears to operate in contradiction to the adaptation of means to ends which he knows to be the right one; and a degree of certainty and firmness in the decisions of taste, is required, for the success of this merely practical part of expression, in the figure, which is not at all necessary with regard to the less positive and determinate results aimed at in other styles. This difficulty is, in some measure, lessened, by painting the subject over, two, three, or more times, with colours very light at first, and progressively increasing in tone, till the

* The outline of this picture will be found in the part on perspective, as an illustration of foreshortening.

required vigour of colouring is arrived at: but those masters of their art, who paint, as the Italians designate it, *alla prima*, put on the colours with all their intended depth of tone at first, and, in defiance of the most incongruous and sometimes absurd appearances, work out at once, the result which they have conceived, and taken firm possession of, in their minds.*

EXPRESSION IN THE LANDSCAPE.

In the landscape, expression has a much more indefinite character than in the figure, or in the historical composition. In the first place, there is nothing, in the irregular objects which compose natural scenery, that corresponds with those qualities which indicate perfection in the human species, and constitute its types of beauty.

* Many of the most skilful of the ancient masters, however, have evidently proceeded very frequently on the most cautious plan, as may be proved by the various detached portions of their works, in a more or less finished state, which are still preserved. The original designs for Coreggio's beautiful picture of the Madonna della Scodella, for instance, may be seen, in three parts, in a private collection at Milan; and these, too, in a highly-finished state; the figures possessing quite as much expression and sweetness as in the actual picture. The painting of St. Girolamo may also be seen in parts; the angel with the same heavenly countenance, and Elizabeth in a still more confined position than in the picture itself, in which the artist allowed more room, but still not enough (*See Plate*, p. 124). Again, the figures introduced in the Last Supper, by Leonardo da Vinci, may be met with as detached heads; and Raffaelle, Michael Angelo, &c. were not above these studious efforts to master their subject gradually, and carry out, with pains, their own grand and beautiful conceptions. Occasionally they repeated their efforts on the same canvas; and, when time has worn off a portion of the external surface, a leg, or arm, may be traced, in a different position from that finally adopted. These blunders, however, called by the Italians "*pentimenti*," are very likely to occur, when the artist is attempting to paint "*alla prima*," or from an imperfect sketch.—*Mrs. H. T.*

A tree is not the more picturesque for being of regular growth, nor the outline of a rock or mountain for being symmetrical. Such characters as these tend to lessen the beauty of rural scenery. In the second place, impressions more or less definite and uniform, result, in the figure, from certain expressions of the features, and actions of the limbs; whereas, in the scenery which constitutes the landscape, no constant and uniform emotions can be traced to particular classes of objects. The beauties of rural nature awaken, like music, impressions, not of one uniform tenor, but varying with change of time and circumstance, even in the same mind.

The characteristic merits of the figure, and of the landscape, may be traced in the nature of the pleasures which are afforded by these different styles. Those which are dependent on expression in the human features, are, relatively speaking, more limited and definite. Those which result from the contemplation of nature, are vague, indeterminate, and fluctuating; but they are entirely free from the association of those imperfections which are inseparable from human nature.

We may trace the pleasures afforded by the landscape painting, to those which usually attend the contemplation of sublime scenery,—to that delightful and ennobling pursuit of nature's adornments, which generally unites a healthful and invigorated state of the frame, with the most perfect mental calm, and admits, therefore, of the highest degree of contemplative enjoyment. But if it be in the nature of landscape scenery, in opposition to the forms of the human features, to produce a state of reverie in which the mind builds images, and forms pic-

tures, to itself far more perfect than any thing that art can produce; the vagueness and uncertainty which are characteristic of landscape beauty, seem, at first, to oppose themselves to that concentration and clear developement of images and ideas, without which there would be no visible aim in the exercise of art. The characteristic scenes and effects of nature are, however, notwithstanding the mystery which is connected with their expression, sufficiently marked and distinct from each other, to engross a considerable degree of interest individually. The distinctive features which appear severally in the outward forms of different scenes, and the marked changes which are successively brought on, either in the usual or extraordinary course of natural events, suffice, alike, to constitute distinctions which forcibly strike the imagination. Nature supplies to art her most valuable stores, in those effects which accompany her sudden transitions; and art, in order to give additional emphasis to the expression of these characteristic signs of nature, avails herself of various episodes and incidents of her own peculiar resort. The expression of morning or of evening is amongst the liveliest which nature affords; but the smoke rising from the cottage, cattle leaving their enclosures, or the gathering in of the harvest, the collecting of the implements, and other similar incidents, may be made to give additional emphasis to the expression of these periods of the day. The more trifling and unnoticed is the incident which adds expression to a scene, the greater, in general, is the pleasure resulting from it. The flag waving on the church tower, in Hogarth's picture of the Enraged Fiddler, to

indicate the ringing of the bells, whose deafening peals add to the general uproar, and to the despair of the musician, is an admirable, though singular, instance of expression.

Unity of purpose is as necessary in the expression of a landscape, as unity of action is in the historical subject. All objects must assimilate in one point, however dissimilar they may be in others. There must be some conformity of tone, and relation of form, however great the variety in the characteristic features of the subject. Expression frequently depends, in the quiet landscape, on the gracefulness and beauty of objects set in perfect unison of form and colour. A slight change in the tone of the atmosphere, or in the slender form of a hanging bough, may suffice to complete the expression of a scene thus nicely balanced: unsubdued colours in the clothing of the figures, the too decided green of the meadows, or a cold ripple of the water where a warm sky would otherwise be reflected, would disturb it. The artist fails in retaining these soft and delicate expressions of nature, either in her moments of perfect stillness and repose, or when they mark her fleeting transitions; but he forms, in his mind, an ideal picture, before he paints the real one; he endows it with the sentiment with which he is himself animated; he then endeavours to work up, in light, shade, and colour, to the height of his inspiration, and to make others sharers of his own conceptions; and he succeeds, or fails, in proportion as he impresses, more or less forcibly and distinctly, his ideal scene, on the minds of others.

RELATIONS OF LIGHT AND SHADE.

PREDOMINATING INFLUENCE OF LIGHT.

In the processes of art, relations of light and shade can only include such effects as may result from neutral tints of various degrees of intensity, from white to black; but, considered with reference to nature, the influence of real light must be superadded.

Nature affords striking examples of the predominating power of light over colours of all subordinate shades. Its influence sometimes prevails to such an extent, that form itself cannot be distinctly traced, and often appears changed. For instance, the sharp lights reflected on highly-polished surfaces often appear to cut into some darker object which comes across them, forming an apparent gap; and the sun appears to leave a kind of depression, where it emerges in full brilliancy from the horizon; and should it come in contact with a slender object, such as a pillar or the trunk of a tree, the brilliancy of the light appears to encroach upon its substance, and diminish its width; an effect which Turner has happily represented in a small picture in the possession of Mr. Wyndham, where one of his luminous suns comes in contact with a tower.

The prevailing influence of light, is exemplified, in a less degree, by that of white colour, as is shown by the examples 1 and 2 in the adjoining plate. Fig. 1 widens progressively from its light extremity towards the other, and fig. 2 is most contracted in the centre; but the ten-

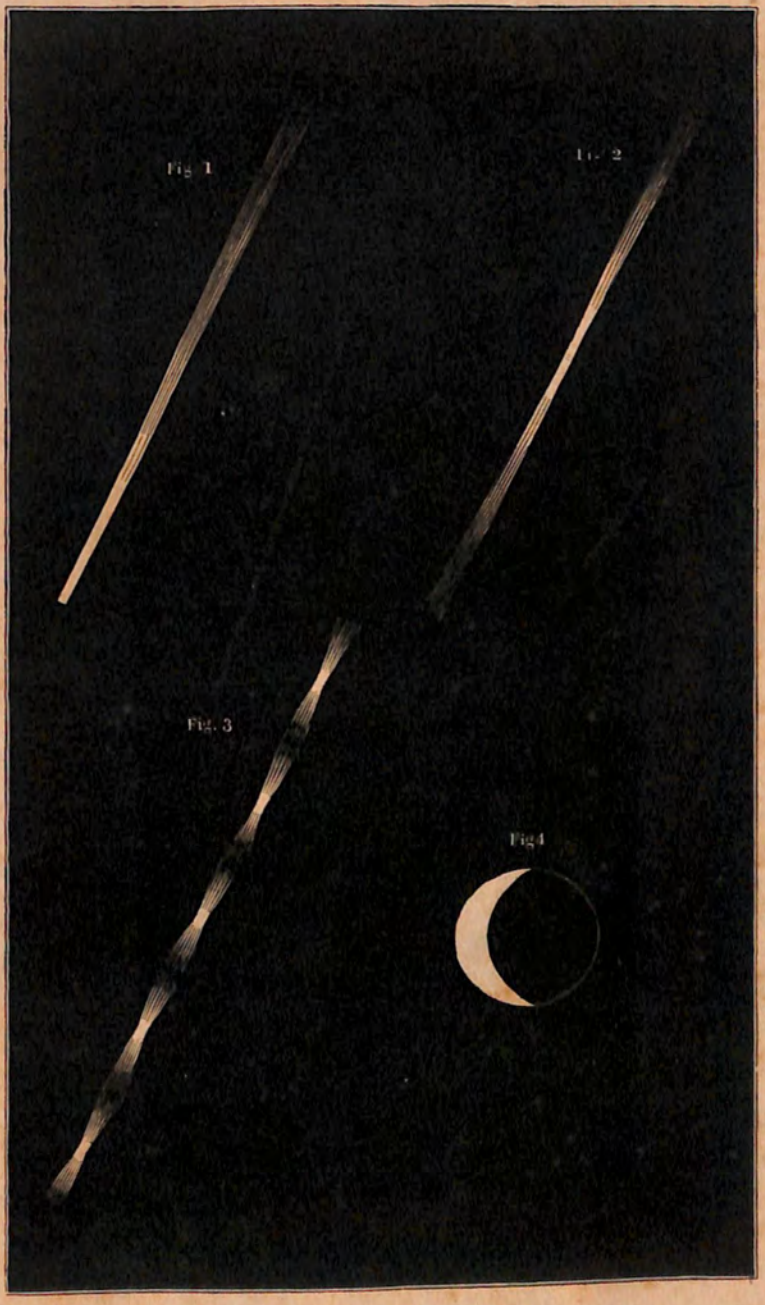
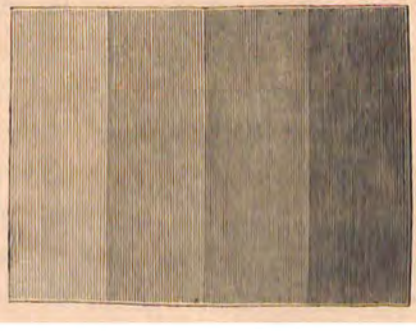


Fig 1
Fig. 2
Fig. 3
Fig4

dency of the white to spread, and to prevail over darker tints, causes these bands to widen in appearance, in the white part; and, viewed at a distance at which the impression prevails rather than the precise boundary, their sides appear parallel. Fig. 3 shows this prevalence of the white over a subdued or grey tint, in producing, when seen from a distant point, more or less the appearance of a straight line with parallel sides; and the white portion of fig. 4 appears to belong to a larger circle than the corresponding darkened portion, an effect which is strikingly exemplified by the greater apparent size of the luminous portion of the moon, in its first quarter, compared with the remainder of its disc, when rendered faintly visible by the light which is reflected from the earth.

EFFECTS OF CONTRAST.

The next point to be considered, in reference to light and shade, is the influence of contrast; embracing the various effects which are due to the exercise of a powerful stimulus on the organ of sight. The accompanying figure is an example of the reciprocal action of neutral tints, of various shades, placed in juxtaposition.



The delusive result which may be obtained by so trifling a means, may enable us, in some degree, to appreciate the extensive and important influence of contrast, in those various and intricate combinations of lights and colours, which constitute the harmony of nature. The parallel bands of neutral tint of various shades, appear darker on the side contiguous to a lighter shade, and lighter on the side contiguous to a darker shade; so that the whole series has a fluted appearance, although the intensity of each shade, taken separately, is uniform. If we can thus be made sensible to a delusive influence, by means so inadequate as those which are afforded by mere gradations of neutral tint, what powerful results might not be expected, from the oppositions of real light and darkness, had we the means of divesting any particular natural appearances of all those influences which act as counterpoises and maintain that equilibrium of harmony which renders nature, subjected to the sense of vision, true and constant in her effects!

By substituting the light of nature for the white of paper or pigment, and its shadows for black, we step beyond these simple effects, and become engaged in that variety of consequences, which depends on all possible combinations both of light and of colour. I will but suggest a mode of classifying these results, and of placing them in a more comprehensible form.

The following are some of the principal distinctions which occur with regard to the transitions of light and shade which are presented by nature: — Firstly, The effects which are due to contrasts of light and shade on monochromatic surfaces, such as white or grey paper; — Secondly, On surfaces affording various shades of the

same tint;—and, Thirdly, On surfaces of all shades, and of all colours; in which case, the brilliancy of the most glaring colour may be united to that of a primitive light, and the darkness of the deepest colour to the obscurity which results from the most complete practicable privation of light. In this last case, the amount of transition which is comprehended in the whole range of colours, from black to white, is combined in its effects, with those which are afforded, in nature, by the opposition of the brightest lights and the deepest shadows. We may easily fancy these extremes of light and shade, as well as of colour, to occur simultaneously, under various circumstances. For instance, we may suppose the white wall of a house, fully exposed to sunshine, to project its shadow over a bank covered with brown mosses. In this case, we have the brown of the moss opposed to the white of the house, and the projected shadow to the full sunshine;—both must be summed up to complete the intensity of the contrast. But we may further suppose that under the house, in the shade, is a hole or small arch, with water running from it, and that this cavity likewise abounds with brown moss or black stains. All this is immediately contiguous to the side of the building which is exposed to the sun, so that the transition would be near enough to be felt. To the previous gradation from sunshine to the projected shadow, we have, therefore, now added the increased gloom which results from a cavity, perhaps further sheltered by surrounding foliage.

Similar examples of contrast, or approaching in power, may occur in a hundred ways; as for instance,

when the white bark of certain trees catches the light of the sun, which is excluded from their blackened hollows; and when sunny rocks and cliffs open, in their shadowy recesses, clefts and fissures darkened by the weeds and water. The clothing of figures, frequently adds very dark local colours to the shadiness of the situation. I need not multiply the examples. It will be evident, that the greatest intensity of contrast which could be produced, would result from the strongest light associated to the brightest colour, on the one hand, and the deepest shadow in connection with the material the best adapted to absorb light, on the other. But it is probable, that we are prevented, by that construction of the eye which enables us to distinguish objects with considerable distinctness in deep shadow, from appreciating the entire amount of contrast which may result from the combined influence of the extremes of light and colour, set in opposition. The sun itself, if we are momentarily able to observe it, when at a considerable elevation in the sky, does not give the impression of a violent contrast with the surrounding space; which may partly be accounted for, by the incapability of the organ of sight to appreciate the degree of darkness which borders the most intense light, and partly from the luminous atmosphere by which the sun appears to be surrounded.

The intense contrast of light and dark which appears to accompany a flash of lightning, results, probably, from the previous condition of the eye, the pupil of which, being dilated by the prevailing darkness, becomes extremely sensible to the sudden brilliancy of the lightning. This is, perhaps, the strongest example of light

and darkness, to which we are rendered familiar by natural effects. It is probably surpassed however by those which are produced artificially, by the combustion of certain highly inflammable substances in darkened rooms.

The deepest shadows which are presented, in the ordinary effects of nature, are far from realizing the impression which we form of complete darkness; for there are no recesses, however protected, which do not receive light, in a greater or less degree, by reflexion; and the increase of light in the shadows, provided the circumstances be not altered, takes place in a ratio corresponding to that of the primitive light. Generally speaking, the intensity of the contrast does not appear to increase with the strength of the primitive light, unless the transparency of the atmosphere be, at the same time, increased. For instance, the observation of the lights and shadows which are produced by sunshine, does not convey the impression of contrasts greatly exceeding in depth those which are formed by the light of the moon; and it may be doubted, whether the latter do not sometimes appear equally strong. Likewise from sunrise till noon, the amount of contrast between the lights and the projected shadows, does not appear to increase in the same ratio as the light itself. If the increase of the primitive light, in such cases, were represented by tens, the progression of the reflected light in the shadows, would be indicated by the corresponding units; but these data are imperfect guides in judging of the apparent effect. The difference between the relative apparent intensity of the shadows and of the lights, chiefly

depends, in such cases, upon the degree of purity of the atmosphere; the shadows being very deep when the sky is clear, and proportionably faint when it is thick and hazy. In fact, the apparent intensity of all projected shadows, is proportionate to the absence, or removal, of all objects which might reflect light. In an open plain, the projected shadows are much deeper, if the sky be clear, than in inclosed places; but the presence, in the sky, of a few bright clouds, will at once diminish the depth of the shadows. I have remarked an extraordinary degree of intensity, in the shadows projected by the rocks on the summit of Mount Righi; an effect which was produced by the combined influence of a pure atmosphere, and of the absence of all neighbouring objects which might reflect light. On the other hand, in places inclosed between white walls, where the sun, shining upon one of them, is reflected back upon the other, as well as on the space between, the projected shadows will at times almost disappear.

I have endeavoured, by employing gradations of neutral tint, from white to black, to establish a term of comparison for the intensity of the transitions which mark the passage from sunshine to shadow, and from simple shadow to the darkness of a confined spot protected from all light. I came to the approximate conclusion, that when the projected shadows of an object were very perfect, and little influenced by reflected lights, the transition alluded to, could be represented, only three times, by the different shades of neutral tint which occur between white and black. I conceive that it may be necessary to explain the manner in which the

experiment was performed, in order to be understood. A board is taken, having, in the first place, different shades of neutral tint, from white to black. The shade No. 1 has such a degree of darkness, that, placed in the sun, it appears to match the pure white, in the shade which is projected by an opaque body. The passage, therefore, from pure white to shade No. 1, corresponds with the transition from sunshine to shadow, on a surface of an uniform tint. In the second experiment, the tint No. 2, placed in the sunshine, is made to match No. 1 in the shade; and in the third experiment, the tint No. 3, which corresponds to black, will match, when placed in the sunshine, No. 2 in the shade: and here we have the transition from primary sunshine to simple projected shadow, repeated three times over, by the gradations which are afforded by the pallet from white to black.

But I must here observe, that simple shadow is not the deepest shadow that nature affords, even in broad daylight. The shadows of hollows and recesses, especially if their surface be darkened so as to absorb light, are much deeper. If, therefore, we compare the scale of artificial tints with nature, we shall find that, according to the previous comparison, we are one shade wanting at the bottom of the series; since it would require one degree more of shade, added to black, to make it equal the darkness of sheltered hollows. The transition, therefore, from bright sunshine to the darkness of the most obscure recesses, would only be equalled twice, speaking proximately, by the whole range of tints, or neutral compounds, from pure white to black. The

pure white with which these supply us, put in a shady place, or in a room (which corresponds, to a certain extent, to a shady situation out of doors), is equivalent only to a grey tint placed in the sun; and, at the lower end of the scale, the darkest black in simple shade, is equal only to a dark grey placed in a gloomy recess. What in nature exceeds the former in brilliancy, and the latter in darkness, art cannot furnish by any material means: we shall afterwards consider whether it can, in some measure, supply the deficiency by artifice. Moreover, in scenes in which the sun's light is reflected by polished surfaces, as by water, some leaves of trees, and other glazed or glossy surfaces, we have a degree of light considerably exceeding the brilliancy of sunshine on unpolished surfaces of any colour. If it be, therefore, our intention to introduce these primary and dazzling reflexes, in any part of a picture, it will become necessary to keep those tints which represent sunshine on light-coloured objects, a degree lower than would be otherwise necessary; and the remainder of the scale, down to black, will become more limited.

Using colours to match the transition from sunshine to shadow, instead of neutral tints, the number of gradations becomes reduced; since, instead of having white for the starting point, we begin with a positive colour more or less inferior to the brilliancy of white. Taking, however, a series of yellow gradations, beginning with chrome yellow, the great brilliancy of that colour, allows the transition from sunshine to shadow to be matched nearly three times, down to black, if the atmosphere be not particularly clear, but little more than twice, with a

transparent and deep blue sky; for in this last case, the yellow, placed in the shade, is exposed only to the blue rays of light, which that pigment does not reflect, and therefore loses much of its brilliancy. With the red and blue series, the experiment can only be repeated about twice; the starting points, namely, vermilion in the one case, and cobalt blue in the other, being considerably inferior, in their degree of brilliancy, to white, or even to chrome yellow. At the lower end of the scale, where those colours are situated which absorb the greatest quantity of light, a much less decided difference of tone is required, to equal the transition from sunshine to shadow, than at the upper end of the scale; for the influence of the sun on the lighter colours, is much more apparent. This is important in paintings where coloured draperies are introduced, since it shows that in dark-coloured materials, the passages from light to shade must be put in, relatively speaking, in a less decided manner than in light-coloured textures.

Differences which result, in the impression produced on the eye, by the dimensions of the contrasting object or tint.—The following circumstances, connected with contrasts of light and shade, have a great influence on the practical method of representing objects in paintings. It is necessary, in the oppositions of light and shade, that the chiaro-scuro be presented to the eye in masses of a certain extent, in order to produce the full amount of contrast of which it is capable. Those transitions which are presented in a minute form, escape, in a great measure, observation. This may be practically

shown, by placing bars or slips, of various thicknesses, in a window-frame, that is to say, between the observer and the principal source of light. Although they be all of the same colour, they will appear more or less dark according to their width or tenuity; the thickest or widest appearing considerably darker than those which are most slender. And if slips or other slender objects, placed at various distances from the eye, be brought into apparent contact with each other, they become darker than when viewed singly, and their increase of darkness is, to a certain extent, proportionate to the apparent increase of width produced by the aggregation of the slips.

When slips or bars, at unequal distances from the eye, are so placed that they appear to cross each other, the point of contact is marked by an increase of shade, forming, as it were, a dark spot. This effect is, however, not exactly the same in all positions. The darkened spot appears to correspond with the intersection, chiefly, when a vertical object crosses one placed horizontally, as in Fig. 1. When slender objects cross each

Fig. 1.

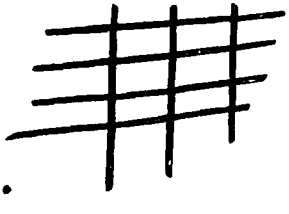


Fig. 2.

Fig. 3.

other diagonally, the darkened knots do not appear to correspond with the intersections, but they are conspicuous at a point contiguous to that of conjunction, as in Fig. 2. In representing, therefore, slender objects which cross each other either contiguously or at various distances, the effects of nature would justify our making them a little harder, or more marked, either at the intersecting points, or in the immediate vicinity. It will perhaps be seen, that in Fig. 3, where the bars are rendered with flat shade, the effect is less natural; but as the result varies, with the relative position of the observer, and of the objects which cross each other, some variety is allowable in the manner in which these crossings are emphasized in a drawing, especially in irregular objects.

Almost every one with whom art is a pursuit, has some vague knowledge of the proponderating influence which is exercised by extent or breadth in uniform shades of tint and colour. The tree which stands out surrounded by the atmosphere, is not painted, even by the unskilled, equally dark and heavy in its centre and on its visible edge or boundary; although, from its situation, the masses of foliage would be equally exposed to light on all parts of its circumference. The intuitive appreciation of contrasts speaks even to the child, and instructs him that the same tint will appear darker on the edge next the light, than where it is surrounded by shade. Facts so obvious require to be neither particularly impressed nor elucidated. It is, however, in effects like these, which are more easily appropriated to the daily purposes of art than examined, that routine

creeps in as it were by stealth, and misleads, not only the indifferent with regard to the truths of nature, but even those who, making her their ostensible study, neglect to analyse and to compare.

Those changes in the appearance of objects placed at unequal distances from the eye, which are due to the difference of the focus of vision which is used alternately to see the nearer and the more distant object, make little impression on the senses, although they are, in reality, very considerable; for the attention of the observer being always directed to the point on which both eyes are simultaneously fixed, that point or object appears to him at the moment invariably perfect: and with such instinctive rapidity is the glance transferred from one object to another, in the appreciation of forms, that it may be presumed that the impression of completeness of that last observed, has not disappeared, indeed, has scarcely diminished, ere the new object, or the part of it upon which the eye is directed, is distinctly beheld. Indistinctness in the boundaries of objects, doubtless occurs in flashes, as the glance is transferred from one point to another; which, with one or two other circumstances unnecessary to particularize, contributes to the appreciation of the intervals of space which separate objects one from another. These undefinable and transitory effects cannot be rendered, or even attempted with any chance of success, on flat surfaces. But the omission of effects, of which we become fully sensible only by taking as it were our own impressions by surprise, cannot be much felt in the picture, in which the subject itself absorbs the whole of the attention. It may, however, be

well to exclude from it the representation of such objects as are situated in the close proximity of the eye.

I will return to the effects of contrast before alluded to, and which are entirely independent of the focus of vision. If we draw lines of various thicknesses, but of equal strength or hardness, on white paper, as in Fig. 5, we find that the result corresponds, exactly, to that of slender bars or slips placed before a strong light, and that the narrowest appear excessively faint, whilst the broadest appear dark and heavy, the progression of strength being proportionate to the apparent width of the lines. Or if a series of parallel lines be drawn, so close together that the intervals between them almost disappear (see Fig. 6), they again acquire an apparent degree of shade and darkness, which we do not connect with the appearance of each line taken singly.

Fig. 5.

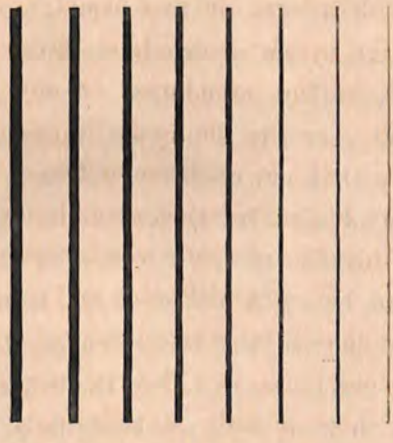


Fig. 6.

This simply brings us back to what I have stated before, that it is not merely the intensity of the shade, but the mass or extent of surface which it covers, which is

required, in order to produce the greatest amount of contrast. There is, however, a point at which the dimensions of the object which is placed against a strong light, or the extent of darkened surface on a white ground, cease to add to the intensity of the opposition. When the angular or visual size of the object intercepting the light, becomes increased to a certain extent, either by adding to its width, or by drawing it nearer to the eye, its surface loses somewhat of its darkness, and the influence of secondary reflections becomes apparent. Thus, if I place in a position to intercept the light, bars or slips, of various colours as well as sizes, those which are neither wide nor extremely attenuated, appear dark, and of an uniform colour; but as their width increases, their colour becomes proportionately more apparent; and coloured bands having about an inch in width, show their colour tolerably distinctly, when placed at the distance of a yard or two from the eye. This can be stated but in an approximate manner; the point at which the effect of contrast appears to diminish, and the local colour of the object to prevail, differing considerably with every observer, owing to the difference of the focus of sight of various individuals. Short-sighted persons would not perceive the local colours of objects placed before a glaring light, from so distant a point as would long-sighted individuals. They are obliged to approach much nearer, before the influence of contrast gives place to local colour. But this effect, though variable in its degree, is nevertheless constant whenever the influences which occasion it are at hand.

Let us mark the contrasting influence of a strong

light, on the most delicate forms of nature; for instance, as it affects the appearance of the twigs and light foliage of trees, and the stems of plants. When a slender twig or reed crosses the sky and distance of a landscape; as it passes from a luminous portion of the background, to one that is less so, for instance, in passing over a small cloud, or a distant hill, it becomes more marked and distinct on the cloud or hill, than on the sky and lightest parts of the distance; whereas, if the object be of large dimensions, it is when opposed to the greatest light, that the contrast will appear the greatest. The stem of a tree, a thick post or pillar, and a distant tower, therefore, become darker, from contrast, as they rise above the neighbouring objects into the luminous atmosphere of the sky.

Let us again mark the result, when a semi-transparent mass, such as the light foliage of a tree, extends over a background more illuminated in one part than in another. It will appear more light and transparent against the luminous part of the sky, than against the darker portion. The light, appearing abundantly through the intervals of the foliage, produces the same result, as if the leaves were of a lighter and more transparent character. A less quantity of light behind, renders the appearance of the foliage heavier. The effect, therefore, corresponds to that of the slender form, taken singly. The light behind does not add to the contrast, but takes off from the hardness of the opposition. Harmony and softness are secured by nature, and contrast itself diminished, where, if too powerful, harshness would result. Thus, the circumstance that the eye loses the

exact delineation of slender objects which are surrounded by a luminous atmosphere, becomes a means by which lightness and delicacy are infused into those parts of a landscape where they are required, whilst, at the same time, the whole effect of contrast is maintained, where the bulk and opacity of the objects demand it.

But, in cases of contrast, it is difficult to say when the effect requires to be superadded in the imitation, and when the similarity of the conditions of the drawing with those of nature, is of itself sufficient. It may be easy, when the local colour of an object is known to be decidedly lighter or darker than one behind it, or when its exposure to the light is unquestionably greater or less, to determine whether it shall be made to come out in light, or in dark; but when the tint of an object appears modified by the unequal influence of neighbouring contrasts, it cannot easily be determined what allowances are to be made, with regard to positive colour, for those apparent changes which depend on relative effect. For instance, a slender pillar in the aisle of a church, although its tone be uniform throughout, or nearly so, becomes dark where it crosses a window, and light again where it traverses the dark recesses of the vaults or groining. In nature, these transitions in the appearance of the column, are owing entirely to effects neighbouring or correlative. The colour and lighting of the column itself, may be perfectly uniform. But, in the painting, will these accompanying circumstances, if correctly introduced, with mere pigment for light, and without any contrivance or artifice, produce a corresponding result? Or will it be necessary to modify the

tone of the column itself, in its different parts, in order to give the character of truth to appearances which, in nature, are superinduced, and not real?

In the Molino of Claude Lorraine, a little to the left of the centre, there is a slender graceful tree, with scanty foliage, the stem of which winds across the tower of the mill, and emerges thence into the sky. Being so slender and distant an object, it might be difficult to say, how far the deep tone of the building would absorb the light on the stem of the tree, and whether its diameter would be sufficient to make it come out, in light contrast, on the dark background. Claude has not made the stem of this tree at once lighter, as it passes from the clear sky to the darker ground presented by the tower; but, deepening the colour of his brush, has caused the stem to come out in soft shade, as he extended it across the tower. As it widens downwards, however, a little light is thrown upon it, which brings it out with contrast, upon the building. With such apparently feeble means of relief, this object does not appear to adhere to the building, but stands out, lightly and freely. It is one of those cases, in which the exact degree of opposition which each touch of colour meets with, as it is put on, requires to be nicely weighed against those conditions of contrast, which would occur from really existing causes. Where the shrouds of the vessels, in Claude's sea-views, come across buildings more distant, their appearance is natural enough, being somewhat heavier than where they traverse the sky; and it is probable, that although, in nature, ropes do not change their actual colour, whether there be sky or

buildings behind them, Claude found it necessary to paint them considerably darker, where they came out upon the buildings. In painting, we confine ourselves entirely to appearances, whether they be those of light or of pigment; and it is desirable that we should, for a time, forget how we know things really to be.

The diversity which characterizes the colours of objects, is so great, that, generally speaking, any object which, in nature, comes before another more distant, appears to take a shade and colour, contrasting decidedly with that of the object which it crosses; but should the object happen, in certain points, to be of the same tone and colour as the field which it traverses, it is not always necessary, in imitative art, that any means for producing relief should be substituted for those which are wanting in nature. A contrast in some portion of the object, suffices to give relief to the whole; and its appearance becomes less stiff and formal, than when the background has been kept studiously dark, in order that the nearer object may come out with a marked relief on every point. A little uncertainty as to form and relative position, is far more pleasing, than would be a boundary having everywhere the precision of a line traced with the burin.

Most of the principal facts connected with the appearance of objects subjected to such influences as are of daily occurrence, appear so familiar, that it seems almost superfluous to mark them out especially for observation. That objects become indistinct, not only in proportion as the side which we are looking at becomes deprived of light, but also in proportion as the

space behind is more luminous, is a fact known to every one. No person who wishes to see the countenance of his friend, thinks of seating him at the window, and taking a seat for himself at the other end, or the centre, of the room. But, simple and well understood as is this principle in its main results, it does not appear to be appreciated as it ought to be, nor sufficiently applied to art, in its various degrees of influence; and there are many paintings, excellent in other respects, in which the influence of a light behind an object, is not duly accounted for. For instance, figures having the sky for their background, are often put into landscapes, with their features as distinct and marked as if they were placed in a room with a dark ground and a side light; whereas, figures which come out on a luminous atmosphere, appear invariably to lose, more or less, that precision of detail which characterizes them when they are lighted up in front, and stand out before a dark background.

It may be further observed, that objects which are placed before a bright light, appear to borrow their hue, more or less, from the glow which surrounds them. Any strong light surrounding an object, or which is seen beyond it, counteracts the effect of the light which is thrown upon it more feebly from the opposite direction, and appears to diffuse an indistinct warmth or glow over its whole surface. Thus, the shadowy side of a figure placed against the light, does not become opaquely dark, but derives a transparent warmth from the apparent mingling of the rays of light by which the object is surrounded, with the small portion which

is reflected from its surface. The glow of a luminous background, as it appears to extend more or less over the objects before it, causes the most opposite colours to harmonize with each other. Thus, blue, green, and even white draperies, may be brought together under the influence of this aërial effect of light, without any disturbance of the necessary repose of the scene. I would ask any observer of nature to call to his assistance the effects of any bright sunset which he may have witnessed, and to consider its influence on intervening objects. When the sky is illuminated in the west, you will observe, on looking in that direction, that the trunks of the trees, which are bordered on either side by the blaze of the atmosphere, appear of a warm brown tint, harmonizing perfectly with the colour of the sky beyond; but as you trace the colour of the objects which are situated to the right and left at a greater distance from the focus of light, you will perceive that they partake of the cold reflexes resulting from the colour of the sky in the opposite direction. In representing, therefore, comparatively slender objects, surrounded by a strong light, we take very little account of their local colour, since their appearance is an assumed one, dependent on relative effects; but as their removal from the source of these effects causes their influence to diminish, local colours and appearances prevail, and the object becomes, if I may so express myself, characterized by individuality. I have observed the marble columns of an open portico, to lose the spots and veined appearance of the marble, when I placed myself in such a position that the columns appeared backed by the

strong light which was admitted at the extremity of the portico; but when I changed my position, so that the light became hidden, the veins of the marble reappeared, without any additional light on the column itself.

In the landscape scene, one portion of which is illuminated, whilst the other portion is thrown into shade, similar results occur, variously modified according to the strength and distribution of the lights. The immediate effect of a gleam of light thrown across a landscape, particularly if it extend to that part which is near the observer, is not only to increase the gloom of adjacent parts in a degree proportionate to the intensity of the light, but to render all minuter objects, there situated, indistinct, and sometimes almost imperceptible. This circumstance, which appears to be principally owing to the contraction of the pupil of the eye in the presence of a strong light, is one of the chief sources of the variety of effect which is exemplified in every kind of scene, producing results as advantageous to art, as they are pleasing in the scenery of nature; for, as I shall endeavour to show, it affords the elements of two distinct styles. The one, which is based on high finish, elaborateness, and the graphic representation of every object, is presented to us when an uniform light pervades a scene of any kind; the absence of all partial and dazzling lights, then allows the eye to discover every detail, and to appreciate the due value of every local tint: whereas the foundation of the other style depends upon the contrasting influence of a brilliant light thrown across some portion of the landscape; in which case,

the details and minutiæ disappear, and boldness of the masses, united to breadth of effect, prevails. Thus, in proportion as chiaro-scuro, combined with simplicity of form, becomes the predominant characteristic of a picture, the interest derived from minute and graphic representation is less required. The indistinctness which is thrown over any portion of a scene by the contrast of light, becomes an advantage, when, owing to the tameness of its objective, its interest must depend on effect of light and shade; whereas, if its attraction be derived from a different source, namely from the picturesque assemblage of the objects, the effects which result from partial lights would be detrimental to its beauty, since many interesting particulars become lost to the observer, by the remarkable influence of a strong light adjoining the shady parts. Pleasing changes are thus produced in glens, and in situations shaded by dense masses of foliage, when the alternate appearance and concealment of the sun behind a rock or lofty tree, produces gleams of sunshine, varying in their position as the hour advances.

I have sketched a scene in the valley of Lutchenen, near Interlaken, with two distinct and opposite effects. In the first case, the light was nearly uniform all over, and the sketch owed its interest to the form and character of broken fragments of rocks bordering a foaming torrent. The mosses and herbs growing upon them, every mark and stain, and every minute incident connected with the locality, were there with the precision and distinctness of a Brueghel. In the other case, the entire bed of the torrent was thrown into shade by a

Mr. Bunting del. Geo. Barnard, lith.

Day & Son Lith.rs to the Queen.

VALLEY OF INTERLAKEN, BEFORE THE SUN HAS RISEN.

Steady light reflected from the illumined Sky.

group of lofty firs; but a sunbeam, reaching the foreground, brilliantly illuminated a few sprigs and bushes. This bright light, being so near the eye, sufficed to throw the space beyond into comparative darkness, and to render indistinct the objects there situated. A slender bridge of firs, thrown from rock to rock across the torrent, would perhaps have escaped notice, had it not been that, now and then, a figure, rendered visible by the colours of the clothing, or perhaps by its very motion, attracted the eye to that point. In both cases, the scene owed its interest to very distinct principles of picturesque effect.

The following is an effect, due to similar causes, which I have frequently witnessed in the Alps. A mountain to the east conceals the rising sun; and in order better to enter into the subject, I beg the reader to take a seat on a grassy eminence, with the mountain before him. Its flanks are covered with rocks and pasture, interspersed with wood. Before the sun has reached the ridge of the mountain, the general light of day is sufficient to enable you to see clearly the separate masses of the trees, the grey colour of the rocks, and the green patches of pasture. (See 1st Plate of the Valley of Interlaken.) The distinctness of these objects increases with the general light diffused throughout the atmosphere, until the sun has reached the brow of the mountain. At that moment, the spot on which you are seated, being illuminated by its direct rays, throws into apparent shade the mountain before you, and the objects thereon grow confused and indeterminate. (See 2d Plate.) This indistinctness increases as the foreground becomes

more exposed to the sun's rays. Perhaps the morning vapours, and the smoke from some cottages, becoming illuminated as the sun ascends, still further intercept the view of the mountain, which appears enveloped in a dense mist; and its objects do not re-appear with a distinct form, till the sun begins to tip the hanging woods and projecting rocks with its bright yellow, and to separate them, one by one, from the indistinct mass.

The mechanism of stage scenery affords resources, with regard to lights and shades, which no usual process of art possesses; and those very results which depend on the contraction of the pupil of the eye, may be made subservient to the production of some of the most brilliant and overpowering effects. By throwing the audience into shade or light, may be produced alternately, those results which depend on a clear and prominent objective, and those which are due to indistinctness and uncertainty; for when the theatre, or the fore part of the stage, is lighted up, that penetrable indistinctness which represents the more mysterious and sublime effects of nature, seems to pervade the remoter parts. These effects, which, according to the distribution of the light, may either be rendered partial, or be made to pervade the whole scene, become the means of a variety and power in the imitation of nature, of which, transparencies, as well as luminous beams projected through a misty atmosphere, further extend the resources. Neither the merit due to some of these representations, in their present state of advancement, nor the importance which they might be made to acquire, by further improvements and more extensive application, appears to have

Mrs H. Twining del. Geo Barnard, lith.

Day & Son, Lith.rs to the Queen.

VALLEY OF INTERLAKEN.

The distance thrown into deep shadow by the illumined foreground.

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been, as yet, duly appreciated; though from the lively impression which such scenic effects are calculated to exercise on the imagination, as well as from their popular character, such exhibitions are particularly calculated to exercise a favourable influence on our national recreations, and to extend to all classes, a taste for the sublime wonders which often teem in the most unnoticed natural phenomena.

ON CHIARO-SCURO.

Chiaro-scuro is one of the principal means employed for obtaining relief. It causes all such objects as are wanting in the distinction of colour, to come out before each other; and it renders those which these local differences cause to appear distinct, still more prominent. But to make the attainment of relief the chief aim of so extensive and useful a principle in art, would be mistaking its object, and assigning to it, invariably, a part in the picture, which it frequently is not called upon to fulfil. Relief is, in fact, (and I must here express my concurrence in Mr. Ruskin's views), not the object of the picture. If it were, an entirely different plan of proceeding must be adopted. Instead of having, as is at present the case, a supposed direction for the light, in every picture, coming from the right, from the left, or in front, according as the artist deems fit after considering the effect of his piece, his chief consideration would be, the direction of the real light, that is to say, the position of the window in the hall or chamber which

his work is intended to decorate; and the scene or subject chosen, would be such as would afford the means of establishing an easy and immediate connexion with the lights of the apartment, so that they would appear to play upon the objects or figures, and have that reality which, in works intended to be pictures, they do not possess, because, in a picture, the lights are only supposed or conventional. The intended result, whenever relief forms the chief object in view, must be an illusion, and not a painting. Instead of a record of nature, hung up in an apartment for its embellishment, we must expect to see the representation of a window, opening, seemingly, into a vestibule or gallery, and affording a deceptive resemblance of some prospect beyond. In carrying out a design of this nature, one of the chief points to be considered would be, the relation which the supposed prospect seen through this opening would have to the apartment itself, to the prevailing colours, and to the light which there predominates; and if the supposed opening had the appearance of leading to an architectural scene, the lights and shadows on the columns and other parts, would be put in with reference to the light of the apartment with which the architectural scene appeared to be connected, as far, at least, as the influence of this light of the apartment would extend. Thus, the effect (as is the case in imitations of galleries, courts, and perspectives which are intended for illusions) is entirely subservient to the conditions of light, and other causes, which are apparent in the apartment itself, or which would seem to be most likely to prevail beyond its limits.

Such contrivances as these, when they do succeed in producing a momentary delusion, are certainly ingenious, and mark a considerable degree of practical talent; but, in Italy, they are frequently seen in country towns and villas, by unknown artists; and even those imitations of stone bass-reliefs, which, by a minute observance of the direction, extent, and depth, of the shadows, in reference to the nature and position of the principal light in the apartment itself, astonish us by the perfection of the relief, and make us often trust to our eyes rather than to an informed guide,—even these works, however extraordinary, do not establish the reputation of the artist, should he possess one. The simple oil painting, which, not having the same aim, nor any concerted adaptation of real light, cannot pretend to the same perfection with respect to relief, becomes, nevertheless, a very different criterion of real genius, and even of general powers of execution. We may, therefore, easily conceive, that perfect relief is as remote from the real purpose, as it is beyond the attainment, of the painting in its usual form. Although relief may be considered as an additional advantage, and deserve attention as long as other points are not sacrificed to it, the artist would decidedly take a false view of the callings of art, who would set it up as a goal, directing towards it all his exertions; and unfortunately, to strive, as some have done, for this kind of eminence, generally involves the neglect of other attainments which ought to have stood foremost. We cannot expect to see those powers which, like projection and relief, may be termed practical, united, in per-

fection, with those which, like expression and beauty, are fruits of the imagination and sentiment; our physical nature is opposed to it. But in the picture, chiaro-scuro, or light and shade, has other purposes to fulfil than those which in nature serve to mark the rotundity and projection of form. A happy distribution of the lights and shades, becomes of itself a source of pleasing effect and beauty; at times by concentrating the effect, and consequently the impressions of the observer, towards a given point, at times by extending the interest, with the dispersing of the lights, over a wider scene. It is toward the attainment of effect that the varied resources of light and shade are thus chiefly directed. Without this enlivening principle, the eye of the observer, satisfied with a first glance at a picture, would immediately seek for recreation and amusement elsewhere, so necessary it is that favour and attention should be won in the first place by the external appearance, in order that those more hidden perfections which are the result of profound thought and assiduous study, may in turn receive their due consideration.

Light and shade are always at our command, to compensate for what is wanting in form and in positive colour. Where there is too great a redundancy and reduplication of forms and tints, projected shadows, or gleams of light, will connect them all in unity of effect, and establish simplicity where, previously, multiplicity prevailed; and where simplicity draws itself out into sameness, the diffusion of various lights breaks the monotony, and the most bald and uniform objects become teeming with variety.

Lights and shades, diffused over a distant scene, are invaluable as a means of obtaining breadth, without interfering with any of those arrangements connected with locality, which it may be desirable to maintain. The stream of light combines unity with transparency. It admits of the objects being seen distinct from each other, and yet connects them with the link of one common effect; and even where the floating lights are multiple and diversified, the common source whence they proceed, connects them, and the objects upon which they fall, in the same idea.

The multiplication, however, of these lights, in the landscape, cannot, in general, be commended. If carried to excess, this evil is, perhaps, greater than that of reduplication of form. These fugitive and dispersed lights perplex and unsettle the observer;—he finds no resting-place. I have been struck with this fault, in some of the landscapes at our modern exhibitions, otherwise well executed. The introduction of a principal light, more brilliant and extended than the others, and more or less connected with them, does not disturb in the same manner. It forms a centralizing point, which the eye expects, and seeks more or less, in a picture.

LIGHTS OF DIVERS HUES.

The simultaneous introduction of two lights of different kinds, although it might seem to divide the attention, does not produce a bad effect. By different kinds of light, I mean such as prevail, simultaneously,

when the light of the moon is contrasted, in its pale effects, with those of a lamp or fire; when the light admitted into a cathedral, through painted windows, is contrasted with the natural hue of daylight, which comes in from an opposite direction; or, when the sun, breaking through the clouds or partial mist, produces warm tints, which are opposed to the cold light which prevails elsewhere. Great diversity even, is admissible in the combinations of lights of various kinds, without producing an offensive result. The artist will necessarily avoid such as would tend to form separate and distinct effects, and divide his picture into two parts: but the lights which come in different directions, mutually cross each other, as they illuminate the opposite sides of the objects in the scene; the result of which is, that the diffusion of the lights, where they meet, becomes irregular and varied, and they mingle insensibly with each other.

SHADOWS OF DIVERS HUES.

If there be more than one luminary or principal light, the colour of the shadow produced by any one of them is determined by that of the other primary lights. Thus, if a scene be illuminated at once by the moon and by a blazing fire, the shadow caused by the latter, partakes of the cold light of the moon, whilst a shadow from the moon assumes the warm tints of the fire: and, if the light of a lamp be added, different in tone to the two preceding, its shadows will present the mixed tints of the fire and moonlight; the shadows of the fire will

partake of the combined light of the lamp and of the moon; and so forth: the general light will be a combination of all three, although each, alternately, becomes more prevalent in certain parts.

The apparent tone of shadows in general, is, in a great measure, determined by the relation of the secondary, or, rather, tertiary, lights reflected there, with the predominant lights of the scene. In the effects of sunset, the reflexes or secondary lights of the shadowy parts, appear cold, compared with the warmth of the sunshine. Even in the daytime, the shadows have mostly a bluish tinge, in open situations, because the principal light of reflection is that of the sky. The sun's light is, nevertheless, white at noon; and, under the trees, the shadows obtain by comparison a warm yellow tinge, which is increased by the partial transparency of the foliage,—the light which is admitted by transparent objects, being, in general, warmer than that which is thrown off from their exterior surface. There is, therefore, no positive rule as to the relative colour of objects in the light and in the shade. In proportion as the shadow becomes dark and colourless by the diminution of reflected light, its *apparent* tone or colour is the more subjected to the influence of relation; and the tone of the deepest shades in nature, may be considered to be almost entirely relative. If the prevailing tone of the lights be cold, the deepest shadows will appear warm, by comparison; and if the prevailing tints of the lighted portion be warm, the local darks, if there be any reflexes, will appear, by comparison, of a somewhat colder hue. But the light which, more or less, is

everywhere diffused, or, what might be termed the *ambient light*, has, I believe, in almost every case, some influence in warming the shadows; and in no instance, scarcely, does the greatest dark of the hollows appear cold.

It is a fact familiar to every artist, that opaque black does not represent the shadows of nature, and that the browns and bitumens are better suited, partly because they have a closer relation to the effect of nature, partly because they possess transparency, one of the most essential characteristics of shadows. If the shadows of nature are best represented by warm browns, this may be partly owing to the manner in which these transparent colours are put on as glazings, the effect of which is to produce those successive modifications of shadow which are characteristic of transparency. But I believe the successful use which has been made, by the Dutch masters, of these warm shadows, to depend chiefly on the conformity to nature of their relations with the lights; as, for instance, where the tone of the shadows is chiefly relative to that of the sky and distance, it is conformable to nature to employ, constantly, warm shadows, which, filling up the whole of the foreground, oppose the coolness of the distance; but, in scenes in which varied lights and colours prevail, the relation of the shadows must be adapted accordingly. There may be warmer objects in their vicinity, which may cause them to lose part of their own warmth. If introduced into the tints of the flesh, or into the folds of silks and glossy draperies, which would reflect cool lights, the result is heaviness, and not transparency; but the

Flemings were careful to keep their warm browns without the boundary of these light and delicate parts.

CURSORY REMARKS ON THE PROJECTED SHADOW.

At the time when perfection in the landscape was but a recent attainment, the ideas of painters, with regard to effect, seem to have been based, chiefly, on the progression of tints, namely, from dark to light, from strength to feebleness, as they recede into the subject. They had, perhaps, been struck with the beautiful result of Claude's aërial effects, and considered them a brilliant step in the art of landscape painting; and although they did not follow, exactly, Claude's example, it doubtless appeared, that to pursue an opposite course, would be to recede in art. But, with its further progress, different views were gradually entertained, with regard to the means by which effect is produced. It was observed that, in nature, the greatest darks prevailed in those parts, over which deep shadows were projected, to a certain extent independently of situation: and, in consequence of these remarks, the greatest vigour of effect, instead of being concentrated invariably in the foreground, was distributed unequally and variously, according to the nature of the subject, and the ideas of the painter; the chief sources of power being sometimes removed so far back as the middle planes, without injury to the apparent naturalness and truth of the composition. Such effects as these, being, however, occasional rather than usual, in nature, they should be in-

troduced with caution, and without detracting from that sharp and particularizing indication of the details, which is invariably a distinctive character of near objects.

Notwithstanding, however, a successive emancipation from that thraldom which a partial knowledge, only, of the truths of nature, and of the means of art, formerly imposed, we frequently discover, in landscape paintings, a shadow, or belt of dark colour, thrown across the foreground, for the purpose of keeping back the more distant parts. But unless there be a cause, such as some building or tree, for producing so decided a shadow, this effect can be neither true nor desirable. The shadow of a cloud has not so decided nor so straight a boundary, as the shadows to which I allude; and, though marked at a certain distance, it becomes very indistinct and diffused on a near point. The influence of a passing cloud, may separate one tree from another, or a group of figures from another group, but it would not throw one figure into sunshine, and another into shade, belonging to the same group; and the improbability of these accidents of light and shade, in the immediate foreground, causes them to appear affected in this part of the picture. Make a choice of nature; then take her as she appears; and so decided a departure from truth, as the introduction of a belt of dark shade across the foreground, for the seeming purpose of affording a substantial groundwork to the composition, may be done away with.

In the landscape, the shadows of objects form part of the living scene. Any deficiency or failing in the rendering of them, would cause an immediate falling off of

its interest and character of truth. It therefore becomes a matter of consistency, that such important accessaries should be always made dependent on their cause, and conformable, as far as it is possible, to the forms and distribution of the objects which occasion them.

SHADOWS IN THE FIGURE.

In the historical painting, the case is different. Beauty of form, action, expression, and colouring, have there so influential and leading a part in the composition, that the observance of the exact relations of the shadows with the objects which project them, is seldom necessary; and, indeed, the variety and brilliancy of the colours used in the draperies and other parts, so far exhausts the means afforded by the artificial range of colours, that it would be impossible to maintain, in every case, an exact account of the projected shadows, and of their influence on materials of such diversified hues. Now and then, the marked and correct form of the shadow of an arm or foot, on a neighbouring object, may serve to give projection to the limb; but, generally speaking, the crossing of definite shadows with the outlines of positive form, would, in groups of figures, have a disagreeable and confused effect; and the light best suited to such subjects, is that which does not project a definite shadow, but, like the light of a window, or of a luminous sky without sunshine, produces diffused and graduated shadows.

At a certain period of art, named, I believe, the

"Caravaggesque," the opposition of opaque dark with staring white colours, appears to have been mistaken for a means of obtaining the relief of nature. By this use of uniform dark colour, the lights were thrown beyond every scale of harmony. This will become evident to every one who compares the paintings of this school with the chiaro-scuro of the Flemish painters. These artists produced transparency and depth, by maintaining broad middle tints, and by limiting the deepest shadows to small recesses and other dark points. This is how nature presents herself, whenever there is a tranquil effect of light, or such as is best suited for the figure. The prevailing tints of the background are semi-shade, whilst, here and there, darker shadows, perhaps a point or two of the deepest black, give the character of locality to the semi-tints, and an appearance of penetrability to the picture.

By the observance of progression in the shades, and by economy in the use of the darkest, is maintained that apparent depth, which makes the limbs of the figures appear to move in ambient air, instead of adhering to a darkened wall. When every local dark is absorbed by the blackness of the ground tint, it is impossible to give to a subject, that point and spirit which sometimes depend upon the insertion of mere black touches for the eyes, or, it may be, of black hair, or of black velvet.

I have frequently remarked, that semi-shades, well defined, and distinct, both from the prominent lights, and from the deep shadows, have something which is very pleasing and advantageous to the picture. In some of Titian's larger paintings, the tints of the flesh are, in

great part, kept in the subdued tone of projected shadow; which gives them a delicate transparency, and throws out, most pleasingly, those portions of the limbs or head, which receive the full light. As an example may be given an effect in the painting of the Assumption, by Titian, in the Accademia at Venice. The light partly falls on the infant angels, whilst the other parts of these little figures have the warm transparent colouring of half shadow. A similar principle of effect enhances the glow of light which falls on one of the Putini, and other figures, in the picture of the Virgin, by Albano, in the Accademia at Bologna. Various paintings, in these galleries, show the superiority of contrasts of colour, and of light and shade, introduced by means of projected and accidental shadows, over those which depend on the local colour of the objects only. In the picture of the Meeting of Jacob and Esau, by Pietro da Cortona, in the gallery of the Louvre, the prevalence of transparent shade, in the figures, adds greatly to its pleasing effect.

Raffaelle has produced one or two remarkable examples of an opposite principle of light and shade. For instance, in his St. John, in the Tribuna of Florence, a uniformly dark background serves to show off the expression of the features, and the pure correctness of the design: whereas, in the Fornarina, a companion picture, a dark warm ground-tint has enabled Raffaelle to give substance, without heaviness, to the features; maintaining, at the same time, a purity and a firmness of outline, which, in the paintings of this master, are frequently associated with the most graceful forms.

In a small and beautiful picture of Rembrandt, in

the collection of the Marquis of Westminster, representing the Meeting of Mary and Elizabeth, the whole of the distance has been put in of a darkness approaching to pure vandyke brown; nevertheless, we do not perceive the want of that light opening which is generally so much required in the distance of a picture. The mass of darkness does not block up the scene; but through it are perceived innumerable objects, in perspective gradation, which appear to retire almost in the same manner as if they were thrown into distance by the haze and aërial colour of daylight.

ON SOME OF THE PROPERTIES OF LIGHT.

REFLEXES.

A Distinction drawn between Positive Light and Accidental Reflexes, on the Surfaces of Objects.—A portion of the light which falls upon bodies more or less rough, is decomposed before being reflected, and transmits to the eye, the colour and other characters of the body which reflects it; whereas, another portion is thrown off from the body on which it falls, undecomposed, and in its primary state. This portion does not represent the colour of that body, but, rather, the anterior condition of the light, or the colour which characterized it as it sprung from its original source. The

light which is thus reverberated, preserving its original tint, and without conveying to the observer any information respecting the surface which throws it off, alone gives rise to those influences which are generally comprehended in the term *Reflexes*.

Reflexes, or Reflections, is, thus, a term used in art to imply, indiscriminately, those flashes, as well as softer indications of light, which are unconnected with the local appearance of objects. This application is very comprehensive, since light may (according to the nature of the surface on which it falls) be reflected with all degrees of strength. The reflection may be due to a primary light which falls upon an object directly, such as that of the sun, or of a lamp; or it may result from a beam of secondary light, that is to say, which has already been once reflected from a different object. By reflexes, are perhaps most usually implied, in the terminology of art, the secondary lights of reflection, or those which are borrowed from objects which are themselves illuminated directly from the principal source of light. Such is, for instance, the diffused light which is derived from the clouds, from objects in sunshine, or from bodies which, at night, are directly illuminated by a lamp or torch.

These distinctions, however, are not permanent, because the conditions of light to which they apply, are liable to constant changes: as, for instance, the reflexes from the sky, which are but secondary lights, contrasted with sunshine, become the principal or primary lights, when the sun is hidden by a cloud; or when the object, instead of being left in the open air, is removed to the interior of a room, where, from the want of sunshine,

the light reflected from the sky becomes the first or primary light. In the same manner, in scenes which are lighted from various sources simultaneously, the accidental reflexes may become positive lights by the concealment or removal of some of the generating causes, leaving one primary light to prevail uninfluenced. These facts I allude to, less for the sake of definition, than with the design of rendering more easily understood the distinction between accidental reflexes and positive light. The influence which the reflected lights have, in the scene of nature, is not, in general, sufficiently attended to. Polished bodies, or those which are decidedly smooth, are made, it is true, to reflect more light than others; but the various influences of reflected light, on surfaces having various degrees of roughness, or exposed unequally to its effects, are often but very imperfectly accounted for. In fact, the roughest bodies, as well as those which appear to be the most exposed to the influence of a general and uniform light, are, to a certain extent, subjected to the influence of partial reflections. Even rocks, and such materials as, from their coarseness, would appear to be uninfluenced by modifications of light, undergo a very visible change in their tints, when neighbouring objects become exposed to a powerful sunshine; and with respect to the delicate forms and texture of the clouds, it is from reflection that their softest and most varied hues are derived.

In paintings of the human figure, accidental reflections have a very prominent and decided share in the appearance of the subject. The smooth surface, and delicate colour, of the flesh, become impressed with the

slightest and tenderest reflected hues; and the rich colours of adjacent draperies frequently exercise (especially if exposed to a strong light) a most powerful and decided influence on the tints of the skin: effects which, in paintings in general, are not to be seen rendered with the intensity with which nature presents them under given circumstances. The vivacity of the light which is reflected from the most polished parts, gives, especially, a degree of spirit and expression, which can never be realized by flat and dead colour. It is by the varying brilliancy of the reflected light, that is marked the very unequal degree of polish of the different parts, such as the lips, the eye, the hair when even and glossy, or the extreme polish of the head bald with age.* The want of due attention to the reflected lights, is, perhaps, felt still more urgently, in the costume and draperies, than in the heads and members. There is an immense difference in the manner and degree in which the light is reflected by textures of various kinds, from the soft woollen clothing, which absorbs the light nearly equally in every part, to the glossy silks and satins, in which the sharp quivering reflexes are intermingled with the dull positive colour of the parts in shade. All these are very well, and sometimes admirably, rendered, when the artist has made it his special style or object to represent

* A German artist, whose studio I visited at Rome, (one of those severe followers of Overbeck, who appear to trace the true path of historical painting to the examples left by Perugino, and to the other rigid and dry productions of that early school,) deprecated the use of brilliant reflexes in painting, as being opposed to simplicity and grandeur, and as tending to divert the attention from the deeper interest which results from expression and sentiment.

the characteristic nature of various textures and materials in close scenes; but, where other aims have been kept in view, in reference to the subject, the nature of the materials, especially of draperies, has been so imperfectly represented, even by good painters, that the resemblance of the imitation could not be traced to any substance in nature. This may be particularly observed in the raw blue draperies of many of the old masters, in which the lights have the comparative brightness of silk, whereas the folds of the material are those of a more soft and downy substance.

The effects which depend on reflexes of various tints and intensities, are chiefly characteristic of interiors, such as cathedrals, halls, banquet-rooms, or those more humble subjects of cloister-cells and rustic kitchens, of which the Flemish artists have availed themselves for the faithful and spirited representation of materials and utensils of all kinds, with their characteristic polish, graining, texture, or varnishes. In scenes like these, but more especially in those which exhibit abundance of polished marbles and wood, such as the choirs of cathedrals, the principle on which the effect of the scene chiefly depends, is entirely different to that which prevails in most out-of-door subjects. The most usual and prevalent effects, in the latter, are those which depend, either on the local colour of objects, or on the influence of positive lights; whereas, in the effects characteristic of the choir, the cloister, or of the baronial hall, local colour becomes completely subservient to the glaring white lights and quivering reflexes which are emitted from the polished marbles and furniture, and which

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Effects of a reflected light.

sparkle, with still greater brilliancy, in every object of polished metal or crystal. In the figures, those light portions of the apparel which are not glossy, and do not throw off the flash of light, receive it, in modified hues, from the naves and windows; whilst the more sober apparel, contrasts, in deep penetrable shadow, with the distinctness of form, and the sharpness of the colours, which prevail in the neighbouring glow. The annexed Plate may serve to distinguish a scene in which reflected lights prevail, from those in which local colour or positive light predominates; but it cannot be expected to render, without the assistance of colour, either the variety or the strength of the reflected lights.

Distinction between Definite and Indefinite Reflections.—Before entering into further particulars, I will endeavour to show the chief distinctions between the light which is thrown off from rough, and that which is reflected by polished, surfaces. It is known that rough as well as smooth bodies, reflect, alike, the light which falls upon them: the difference between the two, arises from the circumstance, that rough bodies reflect the rays of light diffused, or scattered in various directions; whereas, the surface of a polished body reflects all the rays in the same relative direction, and this represents an angle corresponding to that of incidence. To the indeterminate and scattered reflection of the rays, which takes place on rough bodies, may be traced the circumstance that no image is produced; the colour only of neighbouring objects is made apparent in a greater or less degree; whereas, in the reflection which

takes place on polished bodies, a distinct image of surrounding objects is transmitted to the eye, owing to the undisturbed condition of the rays of light which are there reflected. I have suggested, in my work entitled "Elements of the Picturesque," that the kind of reflection, in which the rays of light are thrown off from the reflecting surface, under the same condition as that in which they have reached it, producing a distinct image, should be termed *definite* reflection, in order to distinguish it from the irregular and indeterminate reflection which takes place on rough bodies, and which I have proposed calling *indefinite* reflection.

Effects of Reflected Light further Developed.—When two bodies are placed contiguously, one of them of a brighter colour than the other, or more exposed to light, the one which is brightest in colour, or most luminous from its situation, throws upon the surface of the adjacent body, a tint or hue corresponding to its own, which becomes the more apparent, as the second body is more in the shade, or more colourless. When two neighbouring surfaces are equally exposed to the light, that which they reflect upon one another is overcome by the superior strength of the primitive light, and is little perceptible. The effects of reciprocal reflection become, however, sometimes apparent in the hollow folds of draperies, producing a depth and richness of tint, which would not be anticipated from the apparent colour of the material when exposed to white light. Colourless surfaces, such as grey and white, are most sensible to the influence of any reflected tint. The hues

which appear reflected on rough surfaces, are the more concentrated and intense, in proportion as the object reflecting them is nearer; and become progressively more faint, and, at the same time, more extended, by the removal of the object producing the reflection, to a greater distance.

Coloured light, reflected on a differently coloured body, has an effect similar to that which results from the mechanical mixture of the two colours: thus, yellow light thrown upon red, produces orange; yellow light upon blue, green; and red light upon blue, purple. Coloured light which is reflected from an object on another of the same colour, adds to the apparent depth and purity of its hue: the blue ground gains lustre by the proximity of a blue object more illuminated; and the red or yellow receive additional glow from objects shining with these colours. Compound colours are much more sensible to those reflexes which partake, more or less, of one of the colours of the compound, than to those which contain none: as, for instance, an orange surface, which is very alive to red and yellow reflexes, is very little sensible to the blue; whilst the green admits either the blue or yellow reflexes, but remains indifferent to the red. A similar inclination shows itself in the pink and purple, either for the blue or the red, when reflected upon it; though, in this instance, the yellow light, owing to its great brilliancy, is not absorbed. The coarser and impurer colours, such as the brown, drab, and others, shine, likewise, with reflected light, and appear modified in accordance with the combination which the reflected light would na-

turally make with their own colour. Even the black, as produced by artificial means, is not insensible to reflected tints.

Under ordinary circumstances, coloured reflexes, as before said, are most apparent on those surfaces which are nearest to the objects which produce the coloured light; but, when foreign objects intervene, and form an impediment to the free passage of the rays in all directions, the relations of the reflected light to the object producing it, give rise to peculiar effects, which are modified by circumstances. Let us take the case of a window admitting the light from without. The external objects or media producing the light, are, a blue sky above, and, beneath, green trees or verdure in sunshine. The valance within, gives a downward direction to the rays which proceed from the blue sky; and, at the same time, a low blind prevents the rays which proceed from the bright verdure from extending very far downwards, and gives them chiefly an upward direction. Thus, the position of the blue, and of the green light, in the apartment, becomes inverted; the ceiling would receive a greenish hue, and the lower part of the walls, and the floor, a blue tint, with varying intensities, as marked in the diagram. A similar distribution of external objects, horizontally, will produce corresponding results in the room, in that direction. It sometimes occurs, that the sun falls upon one half of a curtain, or that which hangs on one side of the window,—we will suppose it to be the right-hand side. Now, if the left-hand curtain prevents the blue light of the atmosphere from penetrating freely into the room, and directs it towards that side on which

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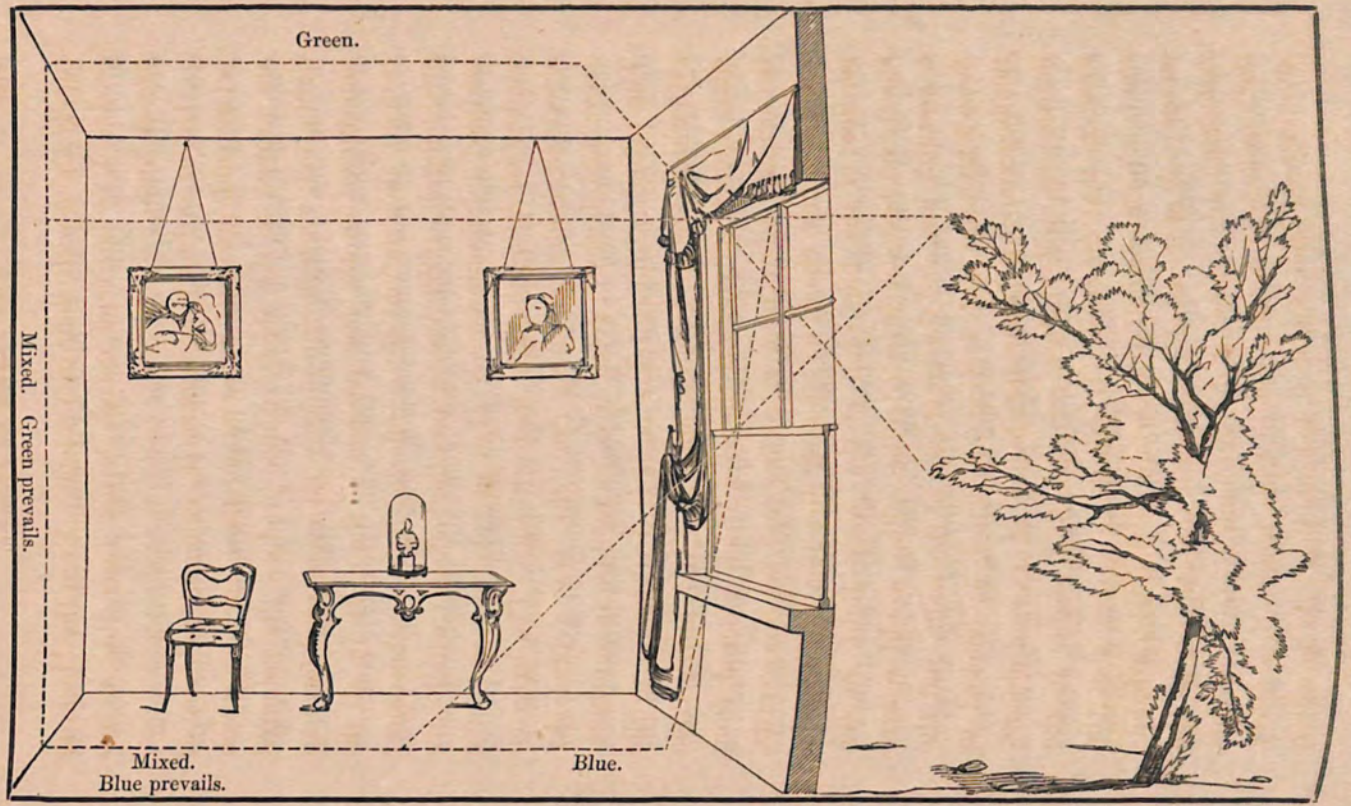

hangs the curtain lighted by the sun's direct rays, its bright azure light will prevail, in that part of the room, over the yellow, or otherwise warm, light of the curtain; whereas, at the opposite end of the room, the blue light of the sky being intercepted by the left-hand curtain, or that which is in the shade, the yellow light of the curtain in sunshine there predominates. Thus, the situation of the lights reflected into the room, is exactly contrary to that of the sources whence they proceed. These passages of reflected lights are generally progressive and gradual: but if, under these circumstances, any object intervene, so as to produce a shadow, the transition from the blue shadow of the sky to the warm shadow of the object illuminated by the sun, is sudden and intense. A dark colourless shadow generally intervenes between the two coloured ones, as the surface on which it is projected, partakes there, neither of the blue light of the atmosphere, nor of the warm light of the object in sunshine. These effects sometimes occur, produced by natural causes, in a picturesque and striking manner, frequently varied by the folds of the drapery, which catch certain reflections more than others, and diversified by other accidental circumstances: and the effects of reflected lights can scarcely be expected to be mastered, in all their variety, unless such results as these are observed and studied from nature, when they are accidentally or designedly produced.

The foregoing remarks are entirely referable to surfaces without polish or glazing: they become impregnated as it were with the tints and hues which neighbouring bright objects throw upon them, the more

in proportion as their own colour is duller and less apparent. But the transition from these, to the polished surfaces which reflect light in a definite form, is not sudden, but gradual. The conditions of the various substantial and solid bodies, present, in this respect, considerable analogy with the circumstances which are peculiar to water, from its ruffled and turbid state, in which the local colour of the water prevails entirely over the reflexes which are thrown off from its surface, to the gentle ripple, in which partly the colour of the water, partly the objective of the neighbouring shores and sky, appear; and from this intermediate state, to that perfectly even and mirror-like condition of the surface, in which every object is reflected with a perfect and definite image.

Leonardo da Vinci, whose remarks are frequently strikingly correct, though somewhat quaint, even in the language of the translator, gives a very good general idea of the modifications to which reflection is subjected, in connection with various natural objects. He says, "Those bodies, of all others, do best discover their natural colour, whose surfaces are the roughest and most uneven. This may be seen in cloth, linen, leaves of trees, and herbs that are furry, on which the light cannot gather in any quantity, and which, for that reason, being unable to receive the images of neighbouring objects, send their colours pure and unadulterated to the eye: hence these bodies are neither tinged with the blueness of the ambient air, nor discoloured with the redness of the setting sun, even when he paints the clouds and the whole horizon with his colour." With regard to polished

bodies, the same writer observes, "Of all surfaces, there is none whose genuine colour is harder to be discerned, than those which are bright and polished. This is observable in some herbs, and in the leaves of some trees, whose surfaces, being smooth and shining, assume that colour which the sun's reflex casts upon them, or at least that of the air which illumines them; insomuch that, in those parts where these reflexes strike, the real colour is but little seen."*

Few of the solid substantial bodies in nature are sufficiently polished, or extended, to reflect definite images of neighbouring objects; but, by including those which have been subjected to manual labour, we may discover the property of reflection in all its different stages, as manifested by the roughest unwrought materials, by the smooth walls or pavement, and by the highly polished articles used as furniture or ornament. When bodies have a certain degree of smoothness, without being polished, they reflect definite images in a very oblique direction only; whereas, if looked down upon, that is to say, in a direction perpendicular to their surface, or nearly so, their own colour and texture appear to prevail, instead of the reflexes from neighbouring objects. An ordinary slate, or the leathern cover of a book, has, in general, just that degree of smoothness that you may perceive the reflection of a finger, or of any other object, in a very oblique direction, and no image at all in a vertical one. This may become every day apparent, by the extreme distinctness with which every

* See Senex's translation of Da Vinci's "Treatise on Painting," 1721, page 85.

object is reflected in a direction nearly horizontal, on polished tables, and other articles which have received the varnish of the cabinet maker; the grain of the wood disappearing, at the same time, almost entirely. It may be likewise observed that, in cathedrals and other buildings, in which some windows are situated higher than others, the quantity of light which appears reflected by the pavement, depends, in a great measure, upon the situation of the window from whence it proceeds. It is, in general, the lowest window which occasions the brighest reflection on the level floor.

The light which falls with equal intensity on different parts of the circumference of a column, may appear to shine more when it is reflected from the edge or boundary of the column, than when it is thrown off from the centre: but I think that it should not be admitted as a rule, as is the case in some treatises, that the edge of the column should invariably be represented lighter than the parts adjoining, as being necessary to the appearance of rotundity, for this is, frequently, not the case, and must depend upon circumstances.

Reflected Lights on Furniture, Household Utensils, &c.—The chief characteristic of definite reflection, with respect to those objects which do not present a sufficient extent of surface, or whose polish is not sufficiently perfect, to produce distinct images, is a flash, spark, or belt of light, varying in extent and form with the size and shape of the objects where these bright reflexes appear, and partly, also, with the position and extent of the primary light whence such reflexes are

derived. These brisk and dazzling reverberations of light, which are so particularly characteristic of household apparatus and decorations, appear also, more or less modified, on the leaves of trees, the coats of animals, or on objects which, from the abundance of moisture, are glazed, as it were, with a varnish of water.

The bright light which appears on one side of every polished object of a round or cylindrical form, such as the legs of chairs and tables, gilded knobs, or earthenware vessels, is invariably the reflection of the strongest light of the locality where these objects are placed. When the object thus reflecting the principal light presents a flat surface, such as the blade of a knife, the top of a table, &c., the reflected light is of considerable extent, but can only be seen when the reflecting surface is placed in a certain angle with respect to the observer, as well as to the opening whence the light comes: but when the object has a spherical shape, the principal light of reflection appears contracted in proportion as the object on which it shews itself is reduced in size; it moves according to the position of the observer, and may be seen by him from any situation which does not exceed 180°, or a right line, from the point whence the light proceeds. It here becomes a thin touch of light on the edge of the rounded body.

In the open air, the principal reflected light is broad and extended, even on circular objects. If the sky be cloudy, or the objects otherwise in the shade, the appearance of these reflexes becomes, at the same time, dull and heavy. When, however, the direct light of the sun falls upon polished objects, in the open air, the

touches of light which are reflected here and there, obtain a degree of brilliancy to which art cannot approach. In the room, where the light from the window becomes the primitive light, it outshines the reflection of any other object which may be in the room, even of a light colour.

The interior of a polished vase or jar, has a second reflection, on the side opposite to that on which the first appears; or, if two jars be placed near each other, the reflection of the one would be seen on the exterior of the other. The extent to which the furniture of a room is reflected on the surfaces of household utensils, &c., varies, of course, with the degree of polish of these apparatus. Those of metal have frequently so high a degree of polish, that the image of almost every object in sight may, with little attention, be detected in them. However, in that superficial kind of view which, from its being the most habitual, is the most expressive of general facts, little else is observed than the principal masses which are formed by the reflection of light and of dark objects. In most cases, the objects which are situated very near the reflecting surface, alone become very conspicuous; so much so, that their reflections might be expected to be individually attended to in a finished and delicate work.

Reflections of objects on convex surfaces, become most contracted or shortened, in the direction in which the convexity of the surface is greatest or most sudden, and more extended or lengthened, in the direction in which the convexity of the surface is least sudden or decided. This is, however, only relative; for no images

reflected on convex surfaces, can appear more extended than they would if reflected in a plane mirror similarly situated. The reflections which take place on the polished sides of concave objects, assume, owing to the multiplication of reflexes from side to side, such irregular and intricate shapes as would defy any rule of imitation.

It frequently occurs, with regard to the reflected lights on furniture and other objects, that the second reflection is seen when the first is not; as, for instance, the light which, from a window, falls upon the leg of a table, does not, in some cases, shine on the leg, but may be distinctly seen in the polished wood flooring, or glazed oilcloth, beneath it; or the light which falls on the polished side of a box or chest of any kind, placed on the table, may occasionally be seen to shine, not on the box itself, but on the table. This takes place, because the light which produces these bright reflexes, is thrown off in the far greater proportion, in the angle corresponding to that of incidence; consequently, falling from the window upon a vertical surface situated below, it continues, after being thrown off, to proceed in a downward direction, and cannot reach directly the eye of the observer: but any polished and level surface on which the object is standing, reflects the light again, upwards, and the eye of the observer catches it, more or less abundantly, according as his position is more or less suited for receiving the light thus doubly reflected.

There is a great difference in the appearance of the bright reflexes on various objects, in connection with their own colour. Some, such as most of the metals, show their native tint, even where they receive the

greatest lustre from strong and partial lights. Others, such as polished woods, glazed leathers and cloths, and even earthenware, give but a faint indication of their local colour in the lights. A cool whitish light is thrown off from most of these glazed objects. It is, doubtless, to the decided and often deep colour, which most of the metals retain, even in the brightest reflexes, that are owing the fulness and splendour of their effects, in polished decorations and ornaments. The rich lustre of jewellery is, doubtless, owing to a similar cause; whereas the light reflected by the polish of most manufactured materials, has, relatively speaking, a dull and sober uniformity.

Where the degree of polish is the same, the reflected lights appear much livelier on such objects as are of a dark colour than on light-coloured objects. This very circumstance Leonardo da Vinci refers to, as being due to contrast; observing that "when the ground is darker than the reflex, the latter will appear strong and sensible, the former serving as a foil to it: so where the reflex is found on a bright ground,* it must of course appear the more dim by reason of the whiteness surrounding it; becoming, by this means, almost imperceptible."

It is by a close attention to the characteristic appearances of the various materials in art and nature, both in the sharpest and brightest lights, and in the shadows,

* The Translator has put "on a ground *brighter* than itself;" which cannot be, since the reflex, or reflected light, must always render any ground, however white, in some degree brighter than the parts over which the reflected light does not extend. See Senex's translation of Da Vinci, p. 62.

that their character and aspect are truly represented. It is necessary to observe the great difference which exists in the degree of susceptibility to light of various polished bodies, from the earthenware vessel, which reflects little else than the principal light which falls upon it, to the polished brass utensil, and gilded ornament, in which the subordinate lights appear likewise reflected; and to remark, also, the very unequal manner in which various smooth bodies decompose and modify the light which falls upon them; how local colour is united chiefly to the shady side of the coarser materials, whereas the bright and polished metals show their native colour chiefly in the reflexes, the light becoming, as it were, impregnated with their colour, before it is thrown off.

TRANSMITTED LIGHT.

With reference to Draperies, &c.—I will now consider the effects which are peculiar to transmitted light, chiefly with regard to colour. The light which is transmitted through substances, more or less transparent, contributes greatly to diversify the effects in which it plays a part. With reference to these effects, it is necessary to distinguish the light which is seen directly through the substance or liquid, from that which is reradiated, or thrown off upon some other object, after passing through the transparent medium. The light which, after thus penetrating the transparent material, is thrown upon surfaces situated beyond, is deeply tinged with the

colour of the substance traversed, and, in general, is diffused in a manner similar to that in which the light is reflected from opaque coloured bodies on neighbouring surfaces. The coloured light which is thus projected on objects which are deprived of it from other sources, has, frequently, a deep and rich hue in the immediate vicinity of the transparent material; but it does not prevail with intensity at any considerable distance, or take a definite form, excepting in the case of stained glass, upon which the direct rays of the sun fall, transferring the colours, and, to a certain extent, the figures impinged on the glass, to surfaces which are situated in a line with the direction of the light. The brilliancy and distinctness of the colours thus transmitted, is proportionate to the privation of light from other quarters.

I next allude to the effect of seeing the light directly through translucid or semi-transparent substances, as when they are hung up before a window. A decided and sometimes remarkable difference appears in the colour of most silks, linens, and draperies of all kinds, according to whether the light is seen through them, or upon them. The greater part obtain a warmer and deeper hue, when seen as transparent materials. This is chiefly the case with those which are glazed, or of a close texture, though, at the same time, transparent. And, in some cases, the dyes of transparent materials greatly outshine in brilliancy the hues of any body colours. Hence the beautiful and unmatched effects of transparencies, of coloured blinds, and especially of stained glass.

The effects which are characteristic of draperies, and other materials, suspended against the light, can be faithfully rendered in painting, only by a due attention to those tints and colours which appear when the light is seen through the transparent material, with reference to those which prevail on the side on which the light falls; that is to say, by observing the relations of the colours which chiefly prevail at the same time, under both conditions of light. For instance, with regard to opaque bodies, truth of imitation depends on the due relation of the tints on the shady side, with those which are on the side of the light; and, in the same manner, with transparent materials, the natural effect depends upon the maintenance of the exact relation between those parts where the object, (a curtain for instance, or any other drapery,) is seen as a transparent material, and those parts in which it is seen as an opaque body. Considerable difference may arise from the degree of closeness of the texture. If there be much space between the threads, the light passes through them without partaking much of the colour of the material. On this account, such thin materials seen in transparency, appear to have less colour when the observer looks up at the light directly through them, than when the material is situated, as it were, less in the path of the light, or less directly between it and the observer; for the light which falls on the reverse of these transparent materials, appears to colour them the more, when it is not seen through them as through a sieve, but when the immediate background is obscure. Thus, the changes which characterize the appearance

of materials when seen with transmitted light, varies with their texture, as well as with collateral circumstances. Many acquire a richer and more brilliant hue; whilst some lose part of their vivacity, and, especially, the purity and freshness of colour which distinguishes them when they are seen with the light upon them. Some of those which have but a faint tincture of red, such as the light pink and buff, acquire an additional blush or warmth, which is very striking if the folds of the material cause it to be doubled, so that the light be subjected to a more complete modification in its passage through the material.

Transmitted Light in Liquids—Many of the richest, as well as most delicate hues, which appear in nature, result from transmitted light. Hence are derived the glowing and yellowish green of the under side of the leaves of trees in sunshine, and the peculiar reddish tints visible in the sky, and on luminous clouds, when dimmed by an intervening film of coarser vapour. Indeed, the most pleasing effects of the atmosphere may, in a great measure, be traced to this principle. In liquids, the influence due to transmitted light is still more obvious than elsewhere; and the increased brilliancy of the local colour, is here a result more constant than in the case of transparent draperies. The pleasing effects which result from the passage of light through water, may be observed especially, in the green and copper-coloured streams of mountainous districts. The white stones in the beds of torrents, and, sometimes, the foam which has been forced beneath the surface, reflect, in beautiful golden hues, the direct rays of the sun. The light which is reflected from

the bottom of glass vessels, becomes likewise tinged, both as it penetrates into the liquid which they contain, and as it is thrown out again; and thus acquires a richness of colour, to which, the convergence of the rays of light, produced by the refracting powers of the glass, frequently gives an increased degree of brilliancy. Hence those sparkling effects and gilded lights of replenished cups and vessels, which, for the purposes of art, would require either to be rendered less familiar, or to be removed to those scenes of boorish mirth and rustic festivity, in which Teniers, Ostade, and Brouwer, displayed their talent in pourtraying character, and indulged in the inexhaustible drollery of their humour.

TRANSPARENCY IN PAINTING.

The charm which transparency lends to a picture, is so evident, that the allusion to it is generally considered to involve encomium. The merit due to transparency may arise partly from the impression of penetrability and depth, where we know that there is none. But, as a deceptive principle, transparency is closely associated with relief; and the inferior merit of this quality, shows that it is not as a means of deception only, that the great advantages of transparency are felt. The impressions of space are always pleasing, even in nature. A distant prospect ever delights more than the barrier which suddenly intercepts the view, however ornamental be its character; and this faculty of retiring in thought into

remote parts, is particularly pleasing, when, at the same time that it is propitiated and encouraged by the artifices of the picture, all the other conditions are maintained, which constitute a whole, both as a subject and as a work of art. Relief loses, from the very opposite causes, part of the interest which it might otherwise claim. It is generally obtained by some great effort; and it is, therefore, very seldom, that the appearance of a marked and decided projection can be extended, alike, to all parts of the subject. A hand and arm, or a leg, come forward, whilst the other members or figures remain at a more sober distance; and the picture loses that unity of effect which results from the equal and progressive vanishing of all the parts. Transparency, in painting, results chiefly from the truthful rendering of the influence of atmosphere in the light and aërial parts, and of indistinctness in the recesses and shadows; whilst, in the details, is maintained a kind of transparency which is peculiar to individual objects.

A characteristic feature of transparency is, that it admits of lines crossing each other, without any apparent harshness or awkwardness in their distribution. The imagination follows, unchecked, the form beyond, at the same time that the eye is arrested by other forms which come before it. After what has been already stated, with regard to forms and the impressions which are immediately connected with them, I may leave the reader to find out for himself, any further clue to this harmless and harmonious meeting, in transparent substances, of cross-lines, the clashing of which, under other circumstances, would suffice to ruffle any nerves,

susceptible in matters of art. Whenever lines intersect each other with sudden angles, without offending, whether it be in the waves of the sea, in the hollow thicket, or in the draperies which cover the limbs and body, there penetrability or transparency must prevail. Such lines could not otherwise meet, without jarring.

Lightness is often regarded as analogous to transparency, in the effects of the atmosphere, because it indicates but little disturbance of the prevailing colour, which is that of light. Light vapours, the more pale they are, the more transparent they appear, if they, by this means, come nearer to the luminous tone of the atmosphere: but there are cases, in which the addition of light produces opacity; for instance, when the ground behind is dark. Clouds, seen from above, or against a mountain, will appear the more transparent, in proportion as the whiteness of the vapour appears tempered by the darkness of the hill or mountain situated behind. The transparency then increases as the colour of the distant object prevails the more; and must be very great, when indications of form appear.

There is this peculiar to the transparency which is connected with drapery, that it may exist quite independently of colour. It is one form influenced and acted upon by a different form; — the projection of the folds and creases of drapery, displaced and modified by the projection of the muscle. Hence the pleasing effect of the draperies, as so delicately expressed by the chisel of the Greeks; — soft and flexible, without colour, — light and transparent, in the native opaqueness of the marble.

PRINCIPLES OF COLOURING.

RELATIONS OF COLOURS.

The colours of nature present relations of two kinds. One kind of relation is that which is afforded by the colours of the prism. These colours, as seen in the rainbow, or in the artificial spectrum, strike us, from the intrinsic beauty of each separate colour, as well as from the perfect harmony and consonance of their arrangement. The other kind of relation is that which is afforded by the indefinite colours which characterize most objects in nature, and which are generally called *broken* tints or colours. The impressions of beauty resulting, either from the colours themselves, or from their association, are here less vivid and immediate, than those which are connected with the aspect of the primary colours, but they are more diversified.

The charm which is connected with the prismatic colours, corresponds with that of simple and pure notes combined in harmony; whereas, the relations of broken colours correspond with the indefinite modulations of the human voice, which accompany speech. The primary colours, like the primitive notes, please of themselves, or by their immediate combinations; the broken tints and colours afford pleasure chiefly by the expression of character, as do the broken sounds of speech by the expression of ideas: and it is remarkable that this analogy, which Mr. Field has so ably developed in his treatise on

Chromatics, shows itself still further in the combinations of sounds, and in those of colours: for it is chiefly in its modulations and inflections, and not in its primary notes, that sound combines with articulated syllables, to show itself with those new attributes which render it the channel of thought; in the same manner as broken and indefinite colours chiefly associate with form, to realize those trains of various impressions, which are linked together by reasoning, and embellished by fancy.

From that distribution of broken colours which depends upon the assemblage of objects of all kinds, results the *harmony of nature*, which I propose considering, before we concern ourselves with another kind of harmony, more flattering to the eye, which is, generally speaking, required in a picture, and which may be termed *harmony of effect.*

ON NATURAL HARMONY,

Resulting from the usual Relations of Lights and Colours in Nature.

In surveying nature with reference to the colours presented to our view, it will be found that some oppose each other, or contrast in a striking manner, whilst the transitions of others are effected by successive gradations. The contrast of the sky with the opaque masses under it, the opposite colours of buildings and vegetation, the passage of the colours of the flesh to those of drapery, the primitive colours of flowers, the distinct markings of

the animal creation, and, sometimes, the bright and diversified reflections of polished surfaces, are examples of abrupt and decided distinctions; whereas, we discover, in the passage from one kind of vegetation to another, in the softer colours of rocks and earth, in the blending of the hues of the sky, and in the tints of the countenance, as well as in the conformable dyes of well-adjusted draperies, thousands of instances of gentle and progressive change.

The most abrupt, as well as the most gentle of these transitions, are equally characteristic of nature, and tend equally to realize those results which render her aspect agreeable. However violent the distinctions of the antagonizing colours—however mild and gentle the relations of others—all appear fit and becoming, because they are in their right place. The visible world is uniformly revealed to us by the same definite signs, the disturbance of which would estrange and disfigure its simplest aspects. These relations, not only of the local colours of objects, but of the reflected lights, and induced shadows, which modify their appearance, being, therefore, necessary to the true character of every object, whether we observe each individually, or in connection with others, constitute the Harmony of Nature. This kind of harmony prevails as much in her habitual and most familiar appearances, as in her extraordinary effects. It is the necessary condition of things in their normal state,—of colours having their usual influence,—of lights and shades exercising their due and wonted action. It prevails throughout all nature, wheresoever the effects appear to correspond naturally with their cause; and it

appears deficient, only in certain effects, of seldom occurrence, which cannot be accounted for by usual inferences. The appearance of each object which constitutes a part of nature, adapts itself to every condition of light, shade, or contrast, which a change of circumstances induces, and is, therefore, in general, in accordance and unison with every visible influence. But when any peculiar or unusual influence manifests itself in nature, the balance between cause and effect appears disturbed, and the degree of harmony requisite to the natural appearance of objects, is wanting.

Owing to our acquired habit of ascribing to objects and effects, those characters which are most apparent, we are, in general, little willing to admit any results of contrast to be deceptions, but hold them to be *bonâ fide* realities, until they are proved to us to be otherwise. The increased darkness which usually surrounds a bright light, is a circumstance so familiar to us, that although the result of an illusion, we do not in general consider it to be such. At the same time it must be allowed, that the luminous atmosphere which frequently appears to surround a light shining in darkness, operates in opposition to the effect of contrast.

There are, however, some circumstances in nature, which render us very sensible to the changes produced by contrast, in the appearances of objects. For instance, the brilliant reflection of the moon, on the ruffled surface of the sea, appears, frequently, to produce the distinct image of a cone of shadow, extending from the horizon to the moon, which forms its apex, whilst its base corresponds with the breadth of the

reflection on the surface of the sea. The intensity, as likewise the extent, of the cone of shade, appears very unequal under different circumstances. The combined influence of the moon, and of its brilliant reflection on the sea, gives to the shadow of opposition, a pointed apex and a widened base, in conformity with the small diameter of the moon and the extent of its luminous reflection; and renders this effect of contrast striking and remarkable. Again, we are, generally speaking, unconscious of any darkening of the portion of the sky which surrounds the moon, when shining, at night, in its full brilliancy. When, however, the moon, in its first quarter, appears in the west, surrounded by twilight, its crescent is accompanied by an apparent deepening of the surrounding blue. There must, therefore, be something peculiar in the appearance of the moon, at the hour of twilight, which does not apply in the conditions in which we usually behold it. What appears most probable, is, that the radiance which usually surrounds the moon, when in its full brilliancy, by lessening the suddenness of the transition from light to darkness, takes away the effect of contrast; whereas, the evening twilight, which deprives the moon of its usual radiance, admits the entire influence of opposition. And, further, the obelisk on the *ci-devant* Place de la Concorde at Paris, has appeared, when lighted by lamps, at night, to be surrounded by a shadow; but other buildings, lighted up in a similar way, do not usually give rise to this appearance: there must have been, therefore, something peculiar, in connection either with the monument, with the lights, or with the general

impression produced, which rendered apparent the influence of contrast of this lighted object with the darkness of the surrounding space. Was the source of the light on the monument less perceived than is usually the case? If so, the degree of light was at variance with the apparent cause; and one cannot be surprised that the darkness of the surrounding space, should likewise present something unusual. The effect not being a customary one, would impress itself the more.

I adopted the following method for testing the influence which would result, in an effect of this kind, from the concealment of the cause. During a dark night, two white square surfaces were placed upright, and at a corresponding distance, separated by an interval of a few feet. The light of a lamp closed at the back, was thrown upon one of the squares, whereas the other square was illuminated by open lamps. The concealment of the light from view, in the first case, by preventing its effect from being the result of a visible cause, might have been expected to render the surrounding darkness more intense. This appeared to be the case to a certain extent, though, perhaps, not so much as might have been anticipated; a more decided difference being that resulting from a kind of haze which appeared to surround the open lamps, and which diffused a somewhat greyish tint over the surrounding space, rendering the shadows less transparent than in the neighbourhood of the lamp closed at the back. It is probable that if a white surface could be lighted up in so artful a manner that no suspicion would arise, in the mind of the ob-

server, as to the source of the light, a remarkable apparent deepening of the surrounding gloom might be produced. He would then view the white surface, and the adjacent darkness, in the manner of relations, and not as customary effects. But our apprehension through sight is, in general, much more alive to the deceptions of art, than to the illusions of nature. How difficult it is to persuade ourselves that a statue of imitation marble is as beautiful as one of the genuine material, whenever the smallest chip broken off discovers to us the deception! And how readily is the impression which is conveyed to us by a single scratch or jag, transferred to the entire object!

In all impressions connected with sight, we judge, perhaps, more by what we have learned by experience, than by what we see before us. Nature very rarely appears to us unaccountable. If certain of her appearances are very remote and peculiar, we generally attribute to them an origin different from the real one, or discover in our fancy another kind of effect, until the true one becomes revealed, together with the cause of its peculiarity. We are frequently unable to explain by analogy, the effects which are connected with the atmosphere, and chiefly with the clouds; consequently they often appear singular, and sometimes unnatural. This arises from the variety of unseen causes which are engaged in producing some of the tints which are peculiar to the atmosphere. Hence, a considerable degree of discrimination is required in the execution of atmospheric effects. But the greater certainty which we experience, both as to the true character of nearer

objects, and as to the influences to which they are subjected, causes them for the most part to fall into the general harmony of nature, and to present, at least, a fitting appearance, although they may differ in the degree of their attractiveness.

In ornamental objects, especially in articles of furniture or dress, in which the choice of the colours is under the sway of fashion, there is scarcely any arrangement of these, to which the eye does not become reconciled by custom. If, however, colours, or even forms, should be employed, entirely different to those which are introduced in the rotations of taste, the result would appear preposterous, or, at least, most fanciful; an effect which might be easily imagined, by supposing, as I think Alison has done, that in the same apartment were associated, a sky-blue carpeting and a green ceiling; the unsightliness of which would, in a great measure, depend upon the distribution of the colours of the apartment being in direct opposition to the order of nature.

If we employ the most fanciful colours that can be imagined, for the designed purpose of subverting the customary appearance of the objects which surround us, it is not so much the distribution of the colours themselves, which offends the eye; but they become repulsive, chiefly by the impressions of the absurd and ludicrous which are associated with them, and by disturbing, with a bad and vulgar resemblance, the truthful image retained in our minds, of more pleasing objects. Another source of unsightliness arises when, by departing from every usual style in the decoration of an object, we cause it to resemble something of inferior value; in which

case, it is rather the impression of inferiority which becomes connected with it, than the actual nature of the decoration itself, which causes it to fall in our estimation. Unless by connections of this kind, that is to say, by counterfeiting objects which are coarse or vulgar, there are scarcely any artificial combinations of colours, to which the eye cannot easily be accustomed. The impression of their being designed, soon reconciles the mind to the most unusual combinations.

In fact all objects which are either useful or ornamental, become, to a certain extent, identified with the general aspect of nature, under whose influence, colours appear right, in every possible diversity of combination and strength: and it may appear remarkable that, whereas, in the natural scene, we discover this perfect adaptation of every colour to its neighbour, making invariably the best of its situation, we find the imitation, in any work of art, to be attended with so much uncertainty and difficulty. Why should not the student, as far as colouring goes, fall into one of nature's effects, when he misses the other? How often is he compelled to alter, and re-alter, his first tints, before he can produce something approaching to any one of these appearances! That it is so difficult to render correctly the simplest of these, is a proof that every combination of colours, afforded by nature, has a tendency to adapt itself to our acquired impressions of propriety, which does not exist in works of imitation; and until the student is able to trace all that he beholds to its very principle, he fails to render nature, and frequently produces but a mockery. I will, therefore, examine the

most essential conditions of that harmonious arrangement which is characteristic of nature's scenery, with a view to facilitate representation, and to insure that precision in the results, which prepares the way to the highest attainments of ideal art. The influence of simultaneous contrasts of colour will be next considered, with reference to this inquiry.

SIMULTANEOUS CONTRASTS OF COLOUR.

M. Chevreul observes, in his excellent treatise on simultaneous and successive contrasts of colours, that the reciprocal influence of two neighbouring colours on each other, causes them to appear different to what they would be without this influence;* and the general *exposé* of his principles, tends to prove, that it is not possible for us to judge of the exact effect which would be presented by any particular colour, if seen disconnectedly from all others. Mr. Field adopts a bolder and more comprehensive theory, by maintaining "that colours should be considered as relations, and that, if there were only one colour in the world, there would be no sense of *colour* at all."† If I understand rightly the author's meaning, it does not imply that no colour has a property of its own, distinct from all others. For, if we deprive any colour, as much as possible, of the

* "De la Loi du Contraste simultané des Couleurs." Par Mons. E. Chevreul, p. 190. Par. 325.

† Field's "Chromatics; or, the Analogy, Harmony, and Philosophy of Colours." Par. 59.

influence of contrast, it still conveys the distinct impression which is peculiar to it. Green, for instance, placed upon white, or black, surrounded, in the first case, by all the rays of light combined, and, in the second case, by none, still appears green; as, in the same way, any other distinct colour appears of that colour, under most of the circumstances that our ingenuity might devise to produce an apparent change. The term "relation" seems to apply, not to the colour itself, which, in every example that can be furnished, is a fact, a result produced by a definite cause, but, rather, to our idea, which, without the relation of one colour with other colours, would be indefinite and confused. Whenever we see a colour, as on white paper, without the contrast of other colours, it is to the impression retained in our minds, of its relation to them, that is owing the definite idea which we connect with it; and we can form no opinion of the kind of impression we should experience, had we never seen it associated with other colours. Like form unrelated to any other forms, it would be meaningless.

Taking M. Chevreul for my guide, in the conclusions which I have formed from personal observation, I will point out some of those influences of contrast of colour, which are most apparent, and consider what share they should have, in painting, amid the various other influences which are to be accounted for.

M. Chevreul distinguishes contrasts of colour into simultaneous and successive effects. The latter, being those which take place in succession, and in consequence of an influence which has passed away, scarcely apply

to the art of painting. The various influences which are connected with simultaneous contrasts of colours, may be all traced to the following general law:—The presence of a bright or powerful colour induces, in its vicinity, or on neighbouring colours, the appearance of the colour which is complementary to itself. Thus, bright yellow, opposed to neutral tint or grey, imparts a purple or pinkish tint to the latter; from the vicinity of red, the grey receives a greenish hue; and from that of blue, an orange tint: whereas, if bright colours be contrasted with each other, the complementary one is superinduced, reciprocally, to each of the positive colours.

If a neutral tint be placed between two primaries, that tint is acted upon differently, according to the nature of the primary which it adjoins. Thus, grey, between blue and red, becomes orange where it borders the blue, and of a greenish hue where it borders the red; grey, between blue and yellow, becomes orange next the blue, and purple next the yellow; if bordered on either side by red and yellow, the induced colours are purple next the yellow, and green next the red.

If, instead of the grey, a primary colour be placed between two other primaries, a similar effect is superinduced to the positive colour, which becomes more or less modified. Thus, with red for a central colour, and blue and yellow for side colours, the red acquires an orange tint next the blue, and a reddish purple next the yellow, whereas its appearance is rendered dull in the centre. Corresponding results take place, by employing the other primaries, successively, for the central and side

colours. The principle is the same throughout, but the influence varies with the degree of brilliancy of the colours employed; so that with a brilliant yellow, for instance, as a central colour, its reaction on the side colours predominates, and the influence of the latter on the yellow is very feeble. Bright colours seem, however, to lose their effect on the black, as the complementary colours do not there appear. Moreover, the foregoing results, although sufficiently constant to be subjected to general rules, are very variable as to the intensity of the impressions which they produce on the eye. The slightest deceptive influence tends to increase, to diminish, or even to obliterate them. The results appear to be most decided, when the eye fixes itself on the colour opposite to that where the superinduced influence takes place; and a motion of the coloured papers, (if these are used,) which tends to deceive the eye, renders the imagination at once more alive to the complementary colours which associate themselves with any given primary.

With results apparently so variable as these, it would be impossible to assign the exact cases in painting, in which allowance should be made for the influences of contrast of colour; but, at the same time, we may feel assured, that the artist possesses great advantages, who is familiar with them. The chief difficulty is, to be able to foretell, in the use which is made of colours in painting, whether their mutual influence will exactly correspond with that which they exercise over each other in the real subject, whether it be a model, draperies, or a landscape. The influence of the colours upon each other, in a picture, may suffice, of itself, for the true representation of the

effect of nature, or it may not suffice. This the artist finds out, by experience only; and I must concur in the opinion, expressed by Mons. Chevreul, that the knowledge of the usual effects of the reaction of colours, greatly assists him in detecting any insufficiency of such reaction in the colours of his painting. If, by mistake, he has modified his local colours with gradations of an opposite tendency to those which would result from the contrast of neighbouring ones, he knows how to correct his error; and, instead of giving, for instance, to white linen a reddish tint, to make it harmonize with the adjacent red draperies, he finds, perhaps, that by giving it a greenish hue, (the complementary colour of the red,) he succeeds more effectually, both as to harmony and nature; or, perhaps, he finds that, in a case in which yellow and blue draperies are contiguous to each other, the effect is rendered more agreeable by deepening the blue, conformably to the influence of contrast, than by giving it a warmish tint in the parts bordering the yellow, with a view to produce harmony. But, as the reader must be aware, there are various influences besides those which result from the contrast of colour, which are to be accounted for in painting; and amidst these different principles, a choice is made of those, the results of which satisfy the eye most completely, or seem most agreeable to the effects of nature.

HOW FAR THE HARMONY OF NATURE IS ATTAINABLE BY THE ART OF PAINTING.

Having considered what are the usual effects of the opposition of colours under given circumstances, we will endeavour to find out whether the ordinary conditions of the picture require the adoption of other means, in order to obtain results which, to the eye, may appear to correspond to those of nature. It is evident that we are able to imitate, tint for tint, any particular effect resulting from combinations of colours in nature, only so far as the conditions of the painting are the same; and that, unless we can make sure that they are so, the truthfulness of the representation must remain uncertain. Now it is the destiny of art, that its productions should never be subjected to the same conditions of light, shade, and colour, as the subjects which are furnished by nature. I have shown, in the section on light and shade, that the transition from sunshine to shadow may be matched two or three times successively, by artificial gradations of colour. But although the artist who sets aside the most violent transitions of nature, may thus sometimes find it in his power to render her gradations in equal value, yet it should be remembered that one great difference must remain, namely, that white in the shade will always form his starting point, or the head of the scale, and not white in various degrees of sunshine. Moreover, colours

which are equivalents for lights in the open air, would cease to be so in a room, where the diminution of light produces a general sinking of the tints, and a corresponding change in their relations. On the other hand, it should be borne in mind, that the passages from light to shade which appear simultaneously in any effect of nature, are not to be compared, as to their degree, with those successive changes which take place from noon to evening, or from sunshine to moonlight. These last transitions are, relatively speaking, immense. The bright torch, which, at night, illuminates every object that its light falls upon, but itself appears almost extinct when placed in sunshine, shows what an amount of diminution may take place in the quantity of light, before we are made aware of it by indistinctness of the objects. But the slow progression both of light and of darkness, in nature, as well as the gradual adaptation of the eye to every new condition of light, by the contraction and the expansion of the pupil, render these changes little perceived: and, in a computation of this kind, we should take care not to mix up those important variations of light which take place in succession, with those which are simultaneously before us, and appreciable to the eye in one instant. The painter very rightly disregards effects which may be witnessed unconsciously, and takes account of those only which are apparent to the eye, and distinctly appreciated by every one.

Let us, therefore, limit the task of the artist who proposes to make a faithful imitation of nature, to the representation of appearances which take place simul-

taneously; and, in order to give him a fair chance of success, let us suppose the effect selected by him to be one of moderate power, and the tints quiet and subdued. His object is to produce an exact transfer of the scene of nature, matching the lights with his brightest colours, and the semi-tints and shadows by colours darkened in various proportions with black; but, in order to do this, it is necessary that the conditions of the picture be made to correspond exactly with those of the subject, or, at least, with some object contained in it, which may serve as a test, or term of comparison, for the remainder. But, in the first place, how can we satisfy ourselves that the light in which we have placed the picture exactly corresponds with any light, in the real scene, which we have fixed upon as a term of comparison for the rest? If it be placed in the shade, it has reflected lights; and what means have we for determining whether they correspond, in degree and tone, to those which fall upon the shadow side of objects in nature? If it be placed in the sun, how can we regulate its obliquity with respect to the sun's rays, so that it be equally illumined with any given object? But, supposing that we were able to establish an exact conformity between the conditions of light in our picture, and those of any one given object, how could we be sure, with the eye for our only guide, that we should be able to match the innumerable gradations of tints and colours which are subjected to the unequal influences of distance, and to the fluctuations of light and shade? The strong lights in nature, exercise a degree of reaction which the imitation lights of paint do not produce. A sketch taken from nature, with one layer of colour, may

be made to appear true; yet it may be painted over with a second layer, so as equally to appear true, although the tone of its colours be greatly deepened. And again, are not the intended situations of pictures, and consequently their final and permanent conditions of light, very different to those which prevail during their execution?

If the truthfulness of a picture were to depend on perfect similarity of shade and colour with any given scene, its character for excellence would suffer with every change of position to which it might be subjected. The moonlight, which science tells us to be 300,000 times less brilliant than sunshine, we find sometimes hung up by the side of an effect of daylight, and merely a shade darker, without its being suggested to us that either the one or the other is a departure from nature.* Both may appear correct and natural, if the colouring remind us of a scene by day, on the one hand, and of a moonlight effect, on the other. It is the characteristic appearance of the objects, and not their degree of darkness, which tells us that it is a moonlight.

Every painting is thus based on principles more or

* The relations above given of the light of the moon to that of the sun, are taken from Mrs. Somerville's "Connection of the Physical Sciences." According to a calculation, based on the difference between the quantity of the sun's light which is reflected to us by the small periphery of the moon, and that which is reflected by the entire surface of our own earth, 57,000 designates in round numbers the difference between the amount of light which we receive from the sun and that which we derive from the moon. In Mons. Bouger's "Traité d'Optique," the light absorbed by the moon is stated to be as 1 to 2 to the light reflected; and with regard to the surface of the earth, the relation of the light absorbed to that which is reflected, is probably nearly the same. According to Dr. Wollaston's photometrical researches, the effulgence of the full moon is 801,072 times less than that of the sun. See Mr. Hunt's "Poetry of Science," p. 98.

less remote from those which govern the subject which it represents; and every painter when he sets to work, takes up a position more or less independent of that nature which he professes to follow, adopting a key-tone which will serve as the basis of all his relations of colours. It is, therefore, with regard to general relations—to the impression given, taken as a whole,—and with heedlessness as regards minor points of identity, that nature can alone be represented by any of the usual processes of art. The best sketches in the open air, may please for a time by their graphic resemblance; but the art of that country would be thought low indeed, which would fill its exhibitions with portraits painted from nature, colour for colour, tint for tint, and nothing more. It is the *impression* of nature with which the artist chiefly concerns himself. Provided he maintain this, and succeed in imparting it in full force to the beholder, it little matters what may be his peculiar views in the treatment of the subject. That artist succeeds best, who conveys the liveliest impression of objects in the most pleasing form. The tone may be improved, the tints varied; new charms may be substituted for those which nature never parts with. This, in my opinion, only successful way of representing nature, as seen through a beautifying mirror, far from being detrimental to the art, ensures that variety, those endless modulations of effect, which answer to every taste, sympathy, and feeling. Imitation, unpolished and unrefined, would narrow the limits of the art, and bring down taste and genius to a level with the meanest mechanical processes.

It is the uncertainty that prevails, with regard to the attainment of truth in imitation, which enables the artist to command the sympathy of the most dissimilar tastes. Be it cheerfulness, softness, delicacy, or vigour, that is required, he can comply, without appearing to digress from that fidelity to nature, which these different styles equally recommend. Subordinate and imperfect means are substituted for those efficient ones which art cannot possess; and the mystery which, to the inexperienced, appears to envelope these operations, disguises an artifice, which, if easily discovered, would take away the charm of imitation, and lessen their estimation of the art.

If, in a gallery of pictures, or exhibition, we set aside a certain number of paintings of which we most approve, we shall find, although we see nature in all, that in each, a distinct and peculiar method has been adopted for translating her effects; and we might discover, that every artist, even though the character of the scenery be the same, has understood nature in a different manner, and has rated differently the privileges which art has a right to exercise in her imitations. Some of these will appear servile, others bold, others fanciful; but our ideas of excellence will not so much result from the closeness of the resemblance, but will chiefly depend on the liveliness with which we are made to experience those impressions which naturally connect themselves with any particular subject. In every case, something more will be demanded of art, than the evidence of that imitative skill which is acquired by practice.

HARMONY OF NATURE;

Considered with reference to Practice in Painting.

If, in connection with the above remarks, we reflect for a moment on the diversity of styles in painting by which nature may be interpreted, and consider the degree of satisfaction attendant on all, we may be willing to admit that the impression of the harmony which delights us in nature, is not the result of one system of imitation, but of an immense variety of systems, although, at the same time, the discomfort and uneasiness which attend our perusal of bad productions, show that there are certain conditions in imitation, the neglect of which causes nature to appear either falsified or greatly impaired. These principles, the whole of which could scarcely be contained in an entire treatise, may be summarily expressed by "corresponding effects for corresponding causes," and are implied in a general manner by the term "consistency." Whatever be the expression of nature which is intended to be produced, whatever contrivance, artifice, or practical skill, be employed to realize this expression, it must be done so throughout, with a perfect and understood relation of one part of the subject to another, of one effect to another effect, and of both to one common and prevailing cause. The neglect of this agreement of every part, or the want of skill to carry it out to its whole extent, is that which distinguishes a bad work from a good one,—a picture

which is harmonious to the eye, from one which is repulsive and discordant.

There is a vast number of paintings which scarcely afford any traces of harmony based on a true principle of relation between the parts. Such paintings a practised eye judges to be infinitely further from nature, than those which have a colouring, exaggerated, it is true, but founded on a principle of obedience to the universal laws which govern cause and effect. When this principle is scrupulously observed in a general manner,—when cause and effect are nicely balanced,—every stroke of the brush tells, and has its influence, as it were, in the whole scene.

Suppose that you are representing a subject with groups of small figures. One of them may appear to want relief. You put in its shadow darker; expecting that the contrast will add to the effect, and make the figure come out more. But you observe, perhaps, that instead of this, there is less effect than before; you perceive that you have put in a black patch, and not a shadow. You then consider its relation with the other shadows, both local on the shady side of the figures, and projected by them on the ground; and you observe, that all these shadows are paler in shade, or more feeble in tone, than the one you have put in. This suggests to you the expedient of deepening these different shadows. The first shadow then no longer appears black paint without a meaning; it begins to express something: and when its relation to the different shadows is completed, due allowance being made for differences of situation and local colour, the desired result, of

figures coming out with a lively expression of relief and action, will be accomplished, and their effect in the picture will become animated and pleasing.

We must not however suppose, that to render the shadows everywhere of a depth proportionate to the degree of light, will suffice in every case. Let us examine whether any other conditions have been neglected, which, in nature, would certainly not have been wanting. You may have thought it fit to darken the coat of a black horse, in order that it should come out better amongst other cattle. But, instead of coming out more, it will very likely have the appearance of a daub of black paint, flat, and without relief, until you have put in those touches of glimmering light which mark glossiness. All these lights, various in their hues, have their exact relation to the strength and direction of the shadows which were put in before, not less than to the breeding of the animal. Should there be no glitter in the sunbeam, less attention is given to these glossy reflections; but the harmony of relations is maintained by strengthening the colours of the other cattle, each according to the positive markings of his coat, and to the relative strength of the local hues of various kinds of animals. Nature may thus be rendered by imitative art, with various degrees of power; but in each successive stage of strength, the exact influence of every agent exercising an active part in the effect, must be duly considered. We should never allow ourselves to be surprised that our imitation does not approach so near to nature as we could wish, until we have faithfully inquired whether any of those conditions which

are inseparable from the existing circumstances of the scene, have been omitted.

In the following ingenious remarks, Mr. Field appears evidently to embrace the opinion that nature may be rendered as well by exaggerated as by subdued colours: "Too much of any colour in a painting, is invariably reconciled to the eye, by the due introduction of its opposite or equivalent, whether in the way of compounding by glazing, or by contrast: in the first manner, with neutralizing and subdued effect; in the last, with heightened effect and brilliancy: in the one case by overpowering the colour, in the other by overpowering the organ; while in each, the equilibrium, or due subordination of colours, is restored." *

Let us consider a case in which power of colouring is sought for. It is when that force of chiaro-scuro is aimed at,—that relief and aërial perspective which seem to give a picture the evidence of nature herself,—that a certain degree of daring must go hand-in-hand with a profound knowledge of facts. If a glaring colour be put alone into a picture, without connection, without object, and without any apparent cause for its peculiar hue, it will appear false; but when opposed by others of equal strength, it ceases to have an exaggerated appearance, and that balance of colour is re-established, upon which the harmony of nature depends. A dash of colour, representing the effect of sunset on a building, may appear too brilliant, or too red: but increase the glow of the evening sky, and it will become reduced to its true

* Field's "Chromatics," par. 60.

character. Perhaps it will be found impossible to give the glow of the sky a degree of brilliancy corresponding to the effect so strongly indicated on the building; in which case, it may be concealed by some intervening object, and other means may be adopted to point out the nature of the effect in question. Care should be taken to give corresponding brilliancy to every object so situated as to be exposed to the glow of sunset: at the same time, bright colours should be cautiously withheld from those parts, where, according to the distribution of the picture, the sun's rays could not reach; for, as above remarked, the resemblance to nature depends less on the degree of colouring, than on the relation of every colour to the circumstances producing it. Where the sun's rays strike upon the building, put in the shadow which it would project on the adjoining walls. Let this shadow cease where the glow of the sun dies away; and let the amount of reflected lights, combined with the local colour of each object, and with the influences of contrast, be observed in every part respectively. For instance, if the sky be clear and blue in the direction opposite to sunset, cold reflections will prevail. They will be stronger on smooth and wet objects, than on rough and dry ones. It is by well marking the characteristic appearances of objects, where the sun does not shine, that the effects which are due to its presence become distinct and satisfactory. Every incident, every feature put on by nature, declares the glow on the building to be that of sunset; and though we have substituted colour for light, and perhaps departed considerably from the tints of nature, yet by the exact coincidence of

every cause and effect, no other intention is suspected than that which is apparent, and the result appears in exact conformity with nature.

If the scene be one in which the lights and shades play no part, but where the chief interest depends upon force of colouring, the local colours are exaggerated, and not the reflected lights. For instance, the scene represents a weather-beaten forest, with mossy trunks and red sand-banks. The trunks of the trees are warm; but to make them come out more forcibly upon the sky, paint them warmer still. They will, perhaps, look unnatural; but add to the colouring of the sand-bank, to the freshness of the surrounding vegetation, in short, to the vivacity of every body colour, and to the rich transparency of the glazed ones. Harmony will now be, to a certain extent, re-established. But if the balance or equilibrium of the colours be still incomplete, mark carefully every other point susceptible of high colouring, and put in the most powerful colours of which the nature of the object is susceptible, exceeding rather what appears natural at the time, and trusting for the re-establishment of harmony and the balance of colours, to their simultaneous effect when all shall have been put in. In this manner great power of effect is obtained; and if the reaction of every colour, not only upon those adjoining, but on colours separated by considerable intervals, be well studied, the whole may be made to appear natural, although each object taken separately would differ widely from nature. In the former example, the brilliancy of the lights, or of the reflected tints, was exaggerated; in the present one, it is the

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local colour of the objects. Thus it is that harmony is obtained, less by softening and toning than by a truthful and spirited indication of character. If the nature of the soil, in the scene last described, were not clearly shown, the red would appear discordant with every thing around it; but point out distinctly its sandy nature, and the red paint, far from appearing exaggerated, will be perfectly in place, and complete the resemblance.

Another picture is before me, somewhat advanced, but not finished. There is an object in it which looks like a tree. It appears dark and heavy. You can scarcely make out whether it be a tree or not; and indeed, until you can in some degree trace its character, its genus at least, you cannot expect that it will grow either lighter in the picture, or more like a tree in nature: but point out distinctly that its darkness is owing to the colour of the spray or foliage,—show it to be a cedar or a yew,—and its blackness will not appear heavy, but the natural result of the characteristic tone of the foliage; and the tree, though darker than everything else, if put in exact relation with other objects, will appear in harmony with everything else.

In the same manner, a rock, in paint, may appear too dark to the observer; because, the nature of the rock not being indicated, he cannot account for its darkness: but give it the characteristics of slate or granite, in such a manner that it cannot easily be mistaken, and its appearance will coincide perfectly with that of other objects, and suggest nothing but what is natural. That very dryness of the outline, and that

suddenness of the transitions, with which you have thought proper to mark the hard and stony nature of the material, will appear to lose their character of harshness, in proportion as the imitation of the slate or granite becomes closer, and the distinction between the hardness of these rocks and the softer edges of other objects is increased.

In cases where we find ourselves bound as to local colour, we must observe whether other means are not open to successful improvement,—whether our lights have sufficiently the appearance of lights, and whether they do not partake rather too much of the nature of paint. For instance, a tree, which we may see clearly is intended for an ash, appears much lighter than an ash would be. Its character is well described, and therefore we do not wish to change it into a tree of a lighter kind; and perhaps it may not be convenient to do so. But we examine if there be any play of light upon its foliage; and if we observe that, with the existing effect, there is nothing in the surrounding parts, or in the sky, to indicate that the light does fall upon the tree, we consider whether the over-brightness of the foliage may not be rendered satisfactorily accountable by giving it more the appearance of being due to an effect of light; and we immediately colour up, with light colours, such of the adjoining objects as, from their position, would be likely to share the light which we intend to throw upon the ash. We likewise make such alterations as we may think fit in the clouds, or in any other objects which would intercept the sun's rays from the tree. The shadows, and all other circumstances attendant on

projected light, of course are not forgotten. Thus, that lightness of the foliage, which previously, from its appearing without a cause, was out of place—an error—an eyesore,—has now become nature, even though we may have added to its amount.

Since the harmony of nature depends, in a great measure, on the characteristic expression of objects, those which are represented too lank and flaccid may be made to gain rotundity and plumpness, by adding to their softness, if, by so doing, the resemblance of the material becomes closer than before; in the same manner that hard and brittle substances, too timorously painted, may be made to partake of that kind of softness which is inseparable from harmony in the relations of objects, by increased hardness and decision of their outline; or that delicate objects, too faintly drawn, may be made to gain more delicacy by being strengthened. Hardness, softness, and feebleness, become defects, only when they are extended indiscriminately to every object in the scene; but they are alike true to nature, when applied, respectively, to objects which are distinguished by such qualities.

A picture painted on the principle of giving to every colour, whether exaggerated or subdued, a relation with other colours corresponding to that which it would obtain in the natural scene, carries with it at least the impress of nature. The most antagonizing colours, and those which in other circumstances would appear gaudy, may be introduced; and yet, if the management be perfect, there will be neither crudity nor tawdriness.

The general tone of the picture will not appear to incline to the extremes either of warmth or of cold, but every colour, every hue, will appear balanced by another; the key-tone will be neutral, and the prevailing harmony will be that of expression and character. A particular effect, a general glow, or a prevailing tone of colour, may be superadded to this harmony of nature. This will elsewhere be further considered.

In pointing out, as far as my experience will allow, the means for attaining powerful colouring, it is not my intention to put forward a style as an example, and to depreciate those styles of painting which show less power of colouring, but make amends for its deficiency by other merits. Each has its distinct object. Those perfections which depend on grace and delicacy, and the various other fruits of the imagination and taste, are seldom united in the same work with great force of chiaro-scuro and colour. The painter who exercises all his energies to obtain that powerful relief which almost equals the projection of nature, is compelled to desert the realms of fancy and poetry. The pursuit of graphic imitation and positive effect, does not easily associate itself with the mystery and indefinite images of a creative imagination. The aims are distinct and opposite, and the same mind cannot grapple with both at the same time. The poetical images of the fancy can only be expected to be realized with brilliant colouring and lively projection, so far as the difficulties of execution are overcome without effort. That skill and practice which can leave this part of the work to the hand,

and set the imagination free, are best calculated to accomplish works of art possessing these different kinds of excellence.

Generally speaking, it may be more useful to point out a method for avoiding weak and insipid colouring, than for obtaining a high degree of strength. Two or three circumstances equally tend to produce feebleness of colouring; namely, the whiteness of the ground tint on which the painter first starts his subject, the greater facility which is generally afforded of bringing out masses one before another in light colour than in dark, a natural distrust of powerful and heavy colours, and an inclination to restore the harmony of a picture by lowering the obtruding colours rather than by adding stimulus to the feeble ones. A certain method is required in the execution of a painting, for convenience sake. For instance; it is found that by commencing with the sky the colours remain more clear and pure for that most delicate part, than if any other portion were painted in first; also, the other objects, following the order of nature, from the most distant to the nearest, are drawn more conveniently after the sky has been put in, than before. But a systematic method of this kind, though desirable in some respects, unfortunately leaves its influence when not wanted; and that purity of the atmosphere, and lightness of the distance, which form the charm of certain effects, are quite out of place in others. Unless it be intended to form a very distant and graduated perspective, care should be taken not to paint the sky too light. By doing so, the distant and middle planes would be likely to become pale and weak. By painting, as cir-

cumstances may suggest, the darker masses of colour first, there is less danger of the general tone of the picture becoming enfeebled by the influence of the light grey of the atmosphere. Although the purity which generally characterizes the tints of the sky, seems, in some measure, to justify its priority in the progress of the painting, nature is too varied in her effects to be imitated by one system only; and although expediency may require the use of rule and method, a constant watch is kept by the vigilant performer, lest system should beget the evils of routine. Particular attention is required to the tints of the sky and water in various effects, and to the relative colour of the principal masses, in order to counteract this tendency to feebleness.

Advancing and Retiring Properties of Colours.— Before offering a few remarks on the relations of tone and colour of the leading objects in the landscape scene, I will call the attention of the reader to the advancing and retiring nature of colours themselves, considered independently of casual and accidental influences.

If colours, isolated from all surrounding objects, be compared together, with a view to ascertain the relation of their advancing and retiring properties, the order of their recedence appears to be conformable to that of objects seen through a light and vaporous atmosphere; the lightest and palest conveying the impression of the greatest distance, and the most heavy and powerful, of the most immediate proximity. With colours chosen accidentally, the white recedes most, or maintains a doubtful position compared with the very light blue;

next to these, come, in advancing order, light yellow, light green, pink, dark blue, dark green, red, and black.

This comparison of the receding and advancing nature of colours, was made by viewing them, in an isolated manner, or in pairs, through one or two small holes in an intervening surface; and its result seemed to prove that the mere brightness of a colour tends very little to make it advance, the bright yellow and light green appearing only one degree nearer than the light blue, whereas the pink, which contains so much of the tint of the atmosphere, advances before them. However, the example employed of the pink colour was heavy; had it been of a lighter tint, it would probably have retired beyond the light green or the yellow. The orange, being a much more powerful colour than this last, took up a very different position, appearing to advance before the dark blue.

The greater prominence, in the scene of nature, of the brilliant colours, (as for instance, of the bright yellow,) is probably due chiefly to their relation with other colours; and when seen disconnectedly, the impression is chiefly that of lightness, and consequently of distance, where uniform light prevails most. Of the darker primaries, red and blue, the red comes foremost, which is conformable to the principles generally adopted concerning the advancing and retiring powers of colours; but from the conclusions I have drawn, perhaps in rather a summary manner, and which I should like to see tested by further observations, it appears to me that the principles usually adopted for the advancing and retiring powers of colours, ascribe the retiring qualities in a too

exclusive manner to the blue colour, and that the accompanying conditions of lightness are not taken in sufficient account. It is, doubtless, to the analogy which a portion of the colours presents with the tints of the sky and distance, that they owe their retiring properties; and this analogy or conformity depends scarcely less on lightness, than on the prevalence of the azure tint. It is true that lights are employed successfully in painting, to denote proximity, and to bring objects forward; but it is principally because they give convexity to form. The light falls chiefly upon the projecting surfaces of objects; and white colour necessarily advances when employed to counterfeit these lights. These bright touches of light become one of the most efficient means of bringing out small objects before each other. They represent those sparkling flashes of light which infuse so much life and spirit into the individual character of nearer objects.

Generally speaking, the distant or proximate appearance of objects depends less upon their colour than upon other distinguishing characters, such as proportion, form, texture, and other properties of the substance. There is no tint peculiar to distance, which cannot be made to advance, by embodying it in some near object duly characterized as such. Certain flowers are characterized by tints similar to those of distance, without appearing to retire from the observer more than others which have stronger colours; and, with the exception of bright green, there is scarcely a tint of the foreground, which might not be seen in the distance under some circumstance or other; but a complete change in their relations prevents their being recognised whenever they do appear

under these unusual circumstances. Nature not unfrequently presents near and remote colours so much alike, as not to be distinguishable from each other until such indications as are peculiar to near objects are discovered, and such marks alone establish their proximity. Black, compared with lighter colours, conveys decidedly the impression of nearness; but, viewed by itself, its position seems to be less determinate than that of other colours, as it probably conveys alternately the impression of a receding cavity, and of a proximate black substance. The relations of progression and recedence between light and dark vary according to circumstances. At sunrise, the most luminous portion of the sky appears to retire most: at night, the bright disk of the moon seems to come forward in the deep blue vault. A white house, and the dark foliage of a tree, may appear equally to come out upon the middle-toned distance: an increase of light, and an increase of darkness, would alike add to their relief; but a sky even more luminous than the house would recede beyond it.

If the light and dark parts of a picture be seen through small isolated apertures, so that all connexion with the subject will be lost, they will appear alternately near and remote; for, as the impression changes, one of these positions suggests itself to the fancy in preference to the other. It appears, therefore, that the advancing and retiring nature of colours, should always be considered as subservient to the truthful and characteristic representation of substance. In scenes, such as interiors, from which the atmosphere is excluded, it may not be always necessary to attend to the advancing and retiring powers

of the colours. In costumes and drapery, the blue may be made to come out before the red, and the grey before the yellow, if the material be well characterized, and the other conditions of situation duly attended to. A picture by Vandyck, in the Louvre, representing two figures doing homage to the Virgin, affords a remarkable instance of a large mass of black drapery keeping its place in the foreground, by the side of livelier colours. But where there is choice, it may be preferable, even in confined situations, to distribute the local colours of objects to a certain extent conformably to the aërial progression of nature at large, placing the warm colours before the cold ones, which are those of atmosphere, but making correct representation the chief means of relief.

With regard to the Relative Tone of Objects in the Landscape.—If the sunshine be general, objects come out in light or in dark indiscriminately, according to the relative lightness or darkness of their local colour. Beginning with the distance, a green slope in sunshine has a light colour, yet not so light but that the tint of a clear sky near the horizon would be lighter still; consequently, though a bright object, it would come out in dark upon the sky behind. Groups of trees, or masses of foliage, although in sunshine, would again appear in obscure colour upon the green slope, the tone of their foliage being deeper than that of the grass; and the objects in the foreground, with the exception of those of a light colour, would again come out in tone, from the want of the intervening luminous atmosphere which lightens the tints of the distant objects. But it some-

times occurs that the deep blue of the sky extends, modified with grey, down to the horizon; in which case, buildings, and even a road, should it appear in connection, come out in light upon the sky.

If there be gleams of sunshine, the effects of light are more powerful in the distance than is the colour of the objects; and those which are lighted up generally come out in light upon those which are not, independently of local colour; whilst nearer objects, not illumined, appear dark upon the sunshine behind them. Sometimes objects in the foreground, having a dark local colour, such as the trunks of trees, or the dingy roofs of cottages, will come out, although in sunshine, in an obscure tone of colour, even on a distance shadowed by clouds. The intervening illumined atmosphere nearly equalizes the lights and the shadows, rendering the whole bright, compared with the deep tone of proximate objects, whose local colour, in sunshine, is thus more dark than distant shadow. It is seldom, however, that proximate objects in sunshine come out in dark upon the more elevated part of the sky. If sufficiently lofty to approach the zenith, the deep blue which they there meet generally throws them out in light.

The facts which, like the foregoing, are subjected to constant change, and less dependent than others on uniform principles of influence, are those which are mastered chiefly by practice; whereas, the study of those more deeply-rooted causes whose influence is general, should not, as far as I am able to judge by experience, be inconsiderately mixed up with practical copying from nature. That excellent tuition of the hand and eye

which is afforded by painting in the open air, should not receive the slightest check from the desire to carry out theories, which, with the book of truth before one, cannot be required.

In the exercise which the student meets with abroad, amidst picturesque scenery, the application of governing principles can, at most, be made in a very free and general manner. It is rather in the after comparison of works, made, respectively, under different and peculiar circumstances, that he is enabled with great advantage to examine the nature of the principle which has the prevailing influence in each; and it is especially with regard to the works of the close studio, where nature and sometimes good standards of art are wanting, to guide the eye and confirm the judgment, that the advantages of a general knowledge of the principles which are most essential to the harmony of nature, are particularly felt. But it must be admitted, that the painter who, at the onset of his work, proceeds with that certainty and assurance which arises from the knowledge of the precise result of every step which he takes, finds out, as he advances towards its completion, that he is frequently obliged to take leave of the guide which is afforded by theory, and to trust entirely to a lively impression of the subject retained in his mind. In this delicate work of refinement, the knowledge of principles assists him only in detecting the causes of the errors which he may chance to fall into, and in enabling him more easily and speedily to correct them; but it is no longer his guide,—it ceases to point out the path which he is to pursue. He must trust, further, to his im-

pression of that which is beautiful and perfect. He must confide himself to his own taste; that supreme, but fickle and variable tribunal, which judges every thing, but at the same time is subjected to the control of fashion, custom, and every influence which stirs up or sways the mind. As the guidance of rule and precept forsakes him, those productions of art on which his taste is founded lead the way, and the perfection of his own productions is involved in all that uncertainty which results from the choice of masters and examples, founded on preference, sympathy, or enthusiasm. The painter is here made to feel his human condition: the nearer he comes to perfection, the greater hazard and uncertainty involve its attainment.

To study from nature freely, and with a view to general effects, affords the safest and most speedy means of dispelling the errors and delusions of routine. It disengages the mind as well as the hand, gives right, as well as new, ideas of colouring, and, above all, inspires assurance. The hand which once trembled to put in the most unmeaning colours, lest they should produce results different from those intended, now employs without restraint the brightest and the most powerful tints, which, far from interfering with each other, produce that very harmony and agreement of the parts, the attainment of which was striven for in vain by lowering the lights and assimilating the colours.

HARMONY OF EFFECT, OR ACCIDENTAL HARMONY.

The practised student, who feels himself perfectly at home in representing the positive features of nature, and such as characterize her ordinary appearances, seeks for those of her effects which possess particular attractiveness. He studies those instances in which a warm and peculiar glow diffused over the scene, appears to superinduce a harmony more beautiful and more perfect than that which characterizes ordinary nature; he avails himself of the hints which she affords, in her varied and most smiling moods; he adopts them as the choicest models; and the imagination, thus stimulated, strews the path of art with its liveliest flowers, and breathes the sweetest incense into her sanctuary.

That kind of harmony which proceeds from the diffusion of a warm light over the scene, might be termed "accidental harmony," in contradistinction to that permanent harmony of nature, through the prevalence of which we invariably derive similar impressions from similar results, and ever discover, in corresponding cases, the same external relations of things. Accidental harmony is manifested in the transient effects of nature: it accompanies the glow of morning, and the fire of the setting sun; or denotes that unusual warmth of the atmosphere, which is perhaps too exclusively associated with a meridian climate; and, in torchlight scenes, it results from the gradual spreading of the light from a

central focus. The term "harmony of effect" might perhaps be found equally applicable; for although effect generally results from opposition and contrast, and consequently, from transitions from light to shade, yet the prevalence of any luminous effect in one portion of a scene, generally diffuses its influence, by reflection, over the other. Effects, however, are but accidents in nature: and whether one expression or the other be employed in preference, it will be equally evident that something more is implied than that distribution and adaptation of the parts, which, under all circumstances, causes our admiration of the visible world; and that there are certain of nature's adornments which the artist claims more particularly as his own. Doubtless, those peculiar merits of colouring which, in all periods, have distinguished certain masters and certain schools, have been chiefly borrowed from those harmonious effects which decorate the primitive beauties of nature with additional loveliness.

That unity of effect which in the picture goes hand in hand with unity of composition, renders almost necessary the adoption of a prevailing tint—a predominating hue—which is called the key-tone of the subject. This decided difference of colour isolates the picture from surrounding objects, and prevents the eye from being disturbed by them. In the paintings of the Venetian school, we admire a harmonious richness of the colours, giving the impression of yellow light on the prominent objects, and of transparent shadow in the darks and recesses. The picture of the Pisani family, by Titian,

in the Chiesa dei Frari at Venice, is one of the best specimens of that master, of a powerful colouring produced by harmonious richness. In those beautiful works of the Flemish masters, especially of Rembrandt, where harmony itself seems to fix the gaze of the observer, the rich transparent browns seem to prevail over every other colour, and to leave very little to be done by the natural relations of tints. Elsewhere, as in Claude, it is the warmth of a vapoury atmosphere which blends all objects together. In Cuyp we have the glow, but not the haze; still there is a common bond between all objects,—a bond which is closer than that which nature affords in ordinary circumstances, and which meets more readily our habitual impression of harmonious relation.

Comparing, in the paintings of the Italian masters, richness of colouring with brilliancy, it has generally struck me that those pictures which possess richness of colouring are most pleasing and effective. If any decided colour prevailed, a warm yellow appeared to me preferable to any other key-tone. This gilded effect appears to be in itself pleasing; and many paintings, which are indifferent with respect to form or composition, attract the eye agreeably, merely from its adoption as the prevailing hue.* The yellow tint predominates in the paintings of Nicolas Poussin; and though there may be a certain stiffness and uniformity in his compositions, it is seldom that his colouring does not please. The analogy which

* Reynolds observes, in his notes on Du Fresnoy's "Art of Painting," that "the predominant colours of the picture ought to be of a warm mellow kind, red or yellow."—[Note xli.]

we are inclined to discover between the yellow colour and light, may perhaps contribute to its pleasing effect. The predominance of the other primaries, such as red and blue, does not appear to be equally successful; and the introduction of the secondary colours, or, binary compounds, especially of pink or purple, for the toning of the picture, has, in most cases, a very disagreeable effect. A decided orange is scarcely ever met with. A prevailing green is, I think, generally disliked, although its abundance in landscape nature renders us, perhaps, less sensible to its disadvantages than to those of the other secondary colours.

Those paintings possess great advantages, which, with a soft and harmonious key-tone, combine agreeable passages of livelier colours. A more complete knowledge of colours, and of their relations, is required, but effects much more lively are produced. A picture by Rubens, of Thomyris Queen of the Scythians, in the Louvre, is pleasing chiefly from the arrangement and harmony of the colours. The dresses of the queen and her attendants pass off from white to yellow and blue, which itself is relieved by the deep red of a hanging curtain, forming a background to the group. A little blue breaks the white in the centre of the picture, whilst a scarlet robe on the left seems to balance that colour on the right. Thus the combination and the opposition of colours, go here a great way, independently of the subject, to form an agreeable whole.

With regard to colouring, the artist has great difficulties to contend with, resulting, if not from prejudice, at least from preconceived impressions. If, in rendering

nature, he limits himself either to the most faithful, or to the most prevalent modes of imitation, he runs the risk of not being noticed; whereas, if he steps beyond, and endeavours to translate her by some means more forcible and expressive than those which are usually adopted, he is frequently condemned without being understood. Every one may be aware with what different impressions he views the same paintings on different occasions, whether before or after having seen other pictures, with the eyes and mind fresh for the perception of the most delicate indications of beauty, or satiated with the most brilliant effects of colouring. Unpleasing associations likewise mix up their baneful influence with those which arise from preconceived ideas of colouring; and the individual who has frequently in his mind's eye any particular colour worn in dress, or used for mean purposes, at once connects it with the colours which he perceives in the picture; and the associations formed, instead of being those of the aurora, or of sunset, will be, perhaps, those of pink ribands and gamboge.

The copy of one of the many choice productions of the old masters, which the visitor to the gallery of Europe admires so much side by side with the original, because he discovers in it the very marks and features which characterize a work of both real and famed excellence, he is surprised to find, on his return, looked upon by his friends, who are unacquainted with the original, with the same sort of feeling as that with which they would regard a very dry production of a modern Italian or German artist. Thus it is, that the mere fact of being able to trace a production of art to an elevated

and dignified origin, bestows upon it a degree of merit which it could never possess in the eyes of persons who are ignorant of the source of those qualities by which it is distinguished. The painter who works for public approbation, can neither tell what preconceived impressions of excellence he may have to deal with, on the part of those to whom the merits of his work will be submitted, nor what construction various classes of individuals may be led to put on his own productions by common-place associations. But these difficulties he must be prepared to encounter; for the observer will seldom allow himself the opportunity of discovering the genuine merits of a picture, if the first sight of it chills or disgusts him: and the artist who has not attained the fortunate point of ruling public opinion, encounters the hard case of being compelled to afford some allurement to the eye, whilst, at the same time, he keeps the strictest watch lest he admit anything which prejudice, or exclusive views, might construe into defects.

In the landscape, where the interest which is derived from the expression of the features, and from the gracefulness of the human form, is wanting, it is generally admitted that colouring becomes one of the chief attractions, and that to excel in this point is almost a sure step to success. But, in the prevailing differences of opinion as to the use of bright colours, some give a very wide construction to the adornments put on by nature; whereas the followers of the classical masters banish, in their strict notions of purity, every thing that has a semblance of tawdriness, as tending to lower the character of landscape painting.

ARTIFICIAL COLOURING;

In connection with the Supernatural in Composition.

As, in the composition of a picture, we are made to experience that kind of interest which is connected with impressions of awe and terror, by the use of supernatural signs and images; so, with regard to colours, the choice of those which are most pleasing to the eye, and their distribution in agreeable series, become the source of a kind of pleasure which is not afforded by the usual appearances of nature. Sufficient occasion for outstepping her habitual effects is afforded by the fabulous descriptions of the ancient and modern poets, and even by sacred history; and the uncertainty which involves imitation with regard to light and colouring, as well as the occasional appearance in nature of extraordinary meteoric phenomena, render still more plausible the use of similar licenses and eccentricities of art. As far as the composition is destined to act on the imagination, its strangest and most fantastic forms may possess a certain degree of elevation and dignity. But as a mere pretext for introducing colours flattering to the eye, and which afford but the sensual pleasure which is attached to prettiness, or the equally fleeting enjoyment which belongs to novelty, such productions as these, however engaging they may be for a time, fall, in real merit, far below those which have for their aim the simple and *bonâ fide* rendering of the ordinary effects of nature; and, in all cases, the slightest neglect

of the rules of taste, or the least opportunity afforded for misconstruction, will convert the most poetical idea, or the most striking image, into the grossest absurdity.

In effects having for their object a display of brilliant colours, great beauty generally results from their succession in gradual and progressive order, and from their being perfectly blended as they pass into each other, producing delicate intermediate tints. It might be expected that, where the absence of all material objects affords complete liberty as to the distribution and arrangement of colours, the natural order of the iris or rainbow would yield the greatest amount of beauty; but this seems to result less from any particular order of succession of the primary colours, than from the introduction of some circumstance, in connection with their arrangement, which renders one order of succession more probable, or more expressive of some idea derived from nature, than another. Thus, if the chief impression be that of the natural aurora, the order of succession would be, yellow, red, and blue, with intermediaries of orange, and pink or purple; but if, in the fancy composition, some iridescent effect be had in view, the prismatic progression of colours, namely, red, yellow, and blue, with the intermediaries of orange and green, and the boundary tint of purple, will be preferable. Even light blue, yellow, red, and purple, will form a very agreeable succession, if there be no warm light in the direction of the blue to prevent this arrangement from appearing a natural one. What the eye cannot suffer, is a dark primary, such as deep red or blue, for a central belt of colour, with light side colours; or,

an alternation of light and dark colours.* These prevent that impression of concavity which is always conveyed by a gradation of colours from light to dark, and which realize those ideas of penetrability and space without which these combinations of colours would lose all their mystery, and become mere relations of pigments.

Mr. Field remarks that the old masters, especially those of the Roman school, show, in their paintings, great deficiency in the knowledge of the natural arrangement of colours, inasmuch as they put the red nearest to light, instead of the yellow.† This last colour undoubtedly forms the most luminous portion of the spectrum; but in the effects of sunrise or sunset, the gradations of tint are diversely modified. In a misty atmosphere, the red appears to prevail chiefly nearest the sun, although the sky may be more luminous elsewhere.

There are cases in which the introduction, in large masses, of a colour almost uniform, but pleasing to the eye, has prepossessed the observer in favour of the picture in which it has been resorted to: the difficulty in an effect of this kind, is to render the appearance natural, and at the same time to modify the prevailing colour with delicate modulations of tint, in such a manner as to prevent sameness.

* In this, as in many other instances, we are forcibly reminded of the very remarkable analogy which exists between the sister arts of painting and music. As the ear is pained by the indiscriminate use of major and minor intervals, or by a change of key, without modulation, so is the eye distressed by a sudden transition, from light to dark, or from one colour to another, without a blending or softening of tints.—*Mrs. H. T.*

† Field's "Chromatics," par. 34.

In compositions which are based chiefly on a graduated distribution of colours, the principal effect may be interrupted by some cause foreign to it, such as clouds and meteors; and in such cases, the order of colours which has been adopted in the general effect, may be repeated with agreeable results, in the partial effects and images with which the scene has been varied: as for instance, a mock sun, or a luminous cloud, the colours of which have been graduated in the same manner as those of a general effect of the iris, pleases the eye because it conveys the impression of one pervading principle throughout, extending its influence to the minor effects as well as to the general masses. Repetition, combined with unity of cause, produces, in all compositions, breadth and greatness.

Though the fancy acknowledges no bounds on the field which is afforded by arbitrary arrangements of colours, there is some natural source whence each of its creations is derived. This should always be kept in view; and indeed the resources which are afforded in this respect by the economy of nature, as also by the organism of the eye itself, are such as might satisfy the most fastidious imagination. In addition to the phenomena which are particularly connected with the sun and moon, to the characteristic appearances of their rising and setting, and to those of the aurora borealis; mists, rain, the dewy moisture of the herbage, and the other ordinary appearances of nature, exhibit the primitive colours in forms as lively as they are fanciful: to which resources, art may justly add those still more fantastic and mysterious images which arise from ocular

illusions; always resting the foundation of its attempts, on some natural or physical law. And in the same manner that ghosts and phantoms, though the offspring of the imagination, and belonging to the realms of spirits, must, in poetic fictions, discover their human origin in their passions and actions; so, in every mysterious effect of light and colour with which the painter thinks fit to enrich his subject, some fundamental truth of nature must appear, in order to give reason and plausibility to the effects and images introduced. The complementary colours may be introduced, conformably to the rules of optics, although they do not belong to the object represented; thus allowing the green and the orange, although really absent from our subject, to be associated with the red and blue: and since the eye derives imaginary impressions of colours from the mere circumstance of dwelling for a time with fixed attention on opposite ones, we can easily fancy that when brilliant colours abound, and constitute as it were the life of the scene, the dazzled eye might discover fancied colours where there is no immediate cause for the real ones. The limits of these embellished, I might almost say variegated, effects, are traced chiefly by the taste and judgment of the painter; but they depend in no small degree on his knowledge of the harmony of colours, and his skill in the manipulation of them; for, in effects in which the most delicate hues are introduced, success is greatly influenced by their purity, and that extreme softness of their gradations which is alone obtained by great manual dexterity.

STYLES OF PAINTING.

It is not my intention to allude, with regard to styles in painting, to those different changes which have marked the vicissitudes of the art,—its rise and its fall,—nor to the characteristic distinctions of the different schools founded by the old masters. The remarks which follow are entirely of a practical nature. Thus considered, the inquiry has a two-fold application;—the choice of a style suitable to the subject intended to be represented; and its adaptation to the genius, taste, and skill of the performer. We will here consider the first of these points.

CHOICE OF A STYLE SUITABLE TO THE SUBJECT.

Before fixing upon any style for a work, its character should be well considered, as well as the means it affords for gratification. If it be an historical subject, requiring little effect, but simple, and capable of moving the mind by the expression of deep thought or impassioned energy, a style devoid of high colouring,—such as Fresco, Tempra, and other similar styles,—is equally advantageous with one which possesses great resources in the way of colouring.* Indeed, the choice of a style at once modest and severe, as that of fresco, would in

* *Tempra*, a style of painting, still employed in Italy, in which size is used as a vehicle, and canvas usually as the surface painted on. It has the inconvenience that the colours undergo a very decided change in drying.

some cases have a decided advantage, on account of the security which it affords against the danger of being led away from the more elevated and estimable qualities of a work, by the fascination of effect and colouring. Reasons like these will account for the fitness of fresco and encaustic for most sacred subjects, the solemnity of which renders misplaced and frivolous any great attention to the colours: to which it may be added, though somewhat foreign to the purpose, that in the sacred composition, there is so strong a connection between the subject and the religious character of the locality where it is seen, that the wall of a consecrated edifice seems the most suitable, and indeed the true site for such paintings; whereas mythology, landscapes, and all subjects which have no particular claim to the place which they occupy under the roof of a mansion, find an appropriate and natural destination on the portable surface of the canvas.

The styles which admit of the greatest delicacy and variety of colouring, are those which best suit the Landscape. Oil and water colours are better adapted than any other: the one on account of the vigour of its colours, and its great resources in combining them; the other from the extreme delicacy and richness of its tints; to which, the whiteness of the ground painted on, and the absence of any vehicle liable to alter with time, give a degree of purity scarcely attainable in any other style. At the same time, the precautions and practical knowledge which are required in water-colour painting, in order to ensure depth and permanency to the tints, and to prevent them from rapidly fading, by increasing the

difficulties of this art, ought to render its productions the more appreciated and valued when successful.

Fresco and tempra do not admit of perfection in the landscape. The comparative dullness of their colour renders them cold and unattractive. Besides, the white or yellowish plaster, when it makes its appearance in the lights, is fatal to illusion. This is exemplified by the flat and insipid landscape-frescoes of Gaspard Poussin, in the Palazzo Farnesina at Rome. The foliage of the trees has nothing of the freshness of nature, and the foreground is devoid of those transparent glazings, which, in the oil painting, frequently compensate for the want of more impressive truths of light and colour. The landscape-fresco chiefly belongs to the decorative style, in reference to which it possesses the advantage of looking well by torch-light, similarly to the decorations of a theatre, where no reflected lights disturb the eye.

The absence of colour in drawings and engravings, renders the attractions which are due to form, or to a rich and animated scene, more necessary than in a coloured work. The landscapes of Gaspard and Nicolas Poussin, which make such elegant engravings, are remarkable either for the forms of a striking character which they present, or for the importance and interest of the objects. The sentiment of a landscape may, however, be beautifully expressed in the line engraving; and it is probably owing to this, that the landscapes of Claude, which are so full of taste and feeling, are so successfully rendered in this style.* The

* I should have been desirous of avoiding to express here, an opinion, concerning the landscapes of Claude Lorraine and Poussin, so diametrically

engraving possesses, moreover, a degree of finish and precision in the details, which becomes almost a substitute for the charms of colour, and enables the varied components of the landscape to please unattired. Besides, every white space being filled up, form is made sufficiently distinct by the diversity of shades, and by the meeting of the hatchings which mark the substance of objects; so that a distinct boundary line becomes unnecessary; whilst the absence of any blank light, gives to the finished engraving, great depth and relief.

STYLES OF PAINTING, CONSIDERED WITH REFERENCE TO THE POWERS OF THE ARTIST.

The other point to be considered, in selecting a style, is its adaptation to the particular talents of each individual; with regard to which, I refer less to the method selected for embodying any subject, than to what the Italians term *maniera*, which, independently of the materials employed, implies those differences of style which distinguished one painter from another, and the productions of the same artist at different periods of his life. Genius, imagination, a correct eye, and lightness of hand, has each its influence in directing the artist's attention to a severe, a fanciful, a precise, or to a light

opposed to those views which Mr. Ruskin has supported with so much strength of argument, and which have been received with such general favour and sympathy: but the above remarks having been put down on paper some years ago, when in Italy, and before having met with the work on modern painters, I do not see any sufficient grounds for altering or retracting them; especially as, in all matters of art, any judgment whatever, must in a great measure be determined by individual taste.

and flowing style where much is expressed in few touches. Shortness of sight generally determines the choice in favour of a minute style of painting. Some have passed, with extraordinary facility, from a minute, to a large style of performance; but, generally speaking, those who paint beautiful cabinet pictures, have only realized harsh and stiff productions, when they have endeavoured to enlarge to any considerable extent.

The examination, founded on comparison, of the examples which have been left to us in different styles of painting by the great masters, may, to a certain extent, guide us in the choice of the one which we propose to adopt; nevertheless, the varying success with which others have cultivated different styles in works of art, could afford but blind and fruitless experience, unless assisted by the intuitive knowledge which every one possesses of his own capabilities,—that implicit confidence which he feels, (all distracting influences being set aside,) that he can succeed better in one particular style than in another. Amongst nations, the customs, the habits, and the degree of civilization, chiefly influence the taste, and determine a style of imitation consistent either with a rude and primitive state of society, or with more advanced practice and experience. The want of the knowledge which is necessary for shading, and for representing objects in perspective, has taught the natives of India to limit their humble attempts in art, chiefly to birds and flowers, which the self-taught artists of that country render with a degree of accuracy and precision, which is the natural result of a decided partiality for the

subjects of their choice.* As art advances, and embraces a more extended range, the influence of national manners and customs becomes less apparent: talent, education, and example, produce that diversity of style in painting which shows itself in the works of individuals. The pervading influence of the different schools of art may, it is true, be traced more or less, but the instinctive admonitions of individual experience still predominate in the apparent results; and, were it not for the various impulses and distractions which shake this innate sentiment possessed by every one, it would point out, unerringly, the fittest course to be pursued. The fear of reproof and censure deters the timid from attempting what their genius and practical skill would otherwise enable them to accomplish; or, seclusion may prevent that extension of their talents which results from the sight of great works, and from intercourse with those who created them.

Lanzi, alluding to the extreme rapidity of the pencil of Tintoretto, observes that "diligence is seldom combined with the desire of accomplishing much,—the true source, in this man, as well as in many other artists, of painting badly, or at least indifferently; whereby Tintoretto gave rise to the remark of Paul Veronese, that he did an injury to the profession, by painting in every manner."† Many, possessing the confidence but not the genius of Tintoretto, are borne away by the desire of

* The above extract, respecting the styles of art practised by the Hindoos, is taken from the unedited papers, relative to India, of Mr. Thomas Twining, late of Bengal.

† "Storia Pittorica della Italia." Vol. iii. p. 157.

equalling the most eminent in art, and do not listen unbiassed to the instinctive voice which points out to them where their true station lies. The desire, and indeed sometimes the necessity, of changing a style which frequent repetition has rendered common and familiar, induces others to attempt that which affords no guarantee of success; and the comparative failure of Wilkie as an historical painter, after his long and eminent success as a generist, shows the danger of such innovations, even to the most experienced. On the other hand, there are examples of painters, who have taken up, with great success, an humble style, after having failed in a more elevated one; and doubtless, the first rank in an inferior style, is preferable to a second or third one in the highest departments of art. There are, however, instances of artists who have successfully progressed from an inferior to a more elevated style of painting; but this has been done gradually, and by stages, at each of which the artist has paused to consider what principles have had the greatest share in every new success. In this considerate manner of proceeding, every step is tested by public opinion, before another is ventured upon.

Every style, however humble, is more or less susceptible of being raised in character; and, if it cannot be elevated to the rank of a classical work, it may at least be exempted from triviality, and receive a sufficient amount of grace and dignity to ensure it a respectable if not a high standing, in art.

STYLE, CONSIDERED AS A MEANS OF LESSENING THE DIFFICULTIES OF EXECUTION.

In addition to the foregoing, a few remarks suggest themselves respecting the great facilities of execution which certain styles afford, compared with others. The choice of a style or process of working, has an immense influence in overcoming the difficulties which attend the first attempts at imitation. The assistance thus to be gained, is chiefly founded on the following circumstances. Certain styles naturally favour and promote, either centralization of effect, or breadth of light and shade. Transparencies, in which, owing to the particular means employed for lighting the subject, the glow is generally accumulated in one bright focus, and diffused thence by equal gradations over the whole, produce almost unavoidably this centralization of effect; whereas, breadth is obtained in those processes of drawing and colouring in which a few bright lights are thrown in after the masses of shading have been completed.

Amongst the various styles which lead to this easy attainment of effect, may be mentioned, drawings with the stump, or in charcoal, touched up with white or coloured chalks; as also drawings on paper prepared with a coating of white cement, where the principal lights are scratched out with a steel point, after the ground tint has been completed. The smoked card, in which, in addition to the bright lights scratched out with

the point, the softer ones are taken off with Indian rubber, is likewise one of the numerous means by which great effect is produced by very few touches.

Various causes contribute, according to the nature of the style selected, to produce the pleasing results with which all appear to be more or less attended. One of the most efficient is, the facility which is afforded by these styles for imitating the effects and striking features of nature; whilst, at the same time, the means of rendering the characteristic and circumstantial particulars are wanting. The performer is consequently compelled as it were to direct his attention to the very conditions of imitation which are most essential to its success; whilst the observer himself, struck with the truth of the effect, neglects to examine whether the representation has been alike faithfully carried out in other respects.

The method of handling, or, rather, the manner in which the manual labour is performed, has also a great influence in assisting or retarding the apparent success. Thus, bold hatchings in a drawing, and regular lines in a print, may not only be agreeable in themselves, but they may become the means of rendering the work more acceptable. In almost every style of painting, but particularly in those in which the handling is most apparent, it is not the subject alone, which an observer examines and interests himself about: the mechanical labour of the artist, that is to say, the manner peculiar to him, or that which he has thought best adapted to produce any given effect, has also its share of consideration and interest; and sometimes the degree of attention which is engrossed by this mechanism of the art, is suc-

cessfully employed to divert the observer from the want of those qualities which are of more difficult attainment. A free, a uniform, as well as an ornamental style of handling, are agreeable to taste; and any marks of the hand possessing such characters, may supply a kind of interest distinct from that which is derived from the imitation of nature, independently of the process employed. This influence of the mechanical process in the general effect of the work, should not be disregarded in any style; but it becomes an abuse when it is made a blind to the genuine merits of a work of art, by offering a snare to curiosity and the other foibles of the imagination.

It may further be remarked that, in the unfinished drawing, chance strokes are evidently intended to play their part in the effect. In the work hastily performed, whatever appears wrong is very readily construed into a *lapsus pennæ*. But the unfinished sketch derives its principal merit from the fancy of the observer. It is remarked by Reynolds, that sketches often convey a higher opinion of the talents of the artist than do his finished works, because the imagination of the observer fills up that which is wanting in the mere sketch, substituting all that is most perfect according to his own ideas. The embellishing influence which is exercised by the imagination, is exactly proportionate to the omission of positive and particularizing forms. Some of the appearances of nature, such as gleams of light, and gentle gradations of sky and cloud, are so vague, and so indeterminate in their character, as to admit of frequent and even striking instances of resemblance from purely acci-

dental causes: and certain processes, such as smoked cards, and other means of obtaining great breadth as well as soft gradations of shade, possess of themselves, or with the slightest additions, nearly all the requisites for a happy though somewhat indefinite imitation. It must be allowed that, in such cases, little skill and art can be necessary for bringing out that which, at the first glance only, appears to be nature. It is, nevertheless, but justice to the fanciers of these light and effeminate productions to observe, that a certain degree of taste is required; for, however simple and easy the process by which the effect is obtained, there must be the discernment and quickness of the eye necessary for fixing the moment when the resemblance is produced. It would be almost humiliating to art to mention some of the absurd and preposterous means which have been resorted to for what is sometimes considered an effective style of imitation. The trickery or the novelty of the process wins approval, in a degree which is proportionate to the extravagance of the means employed, rather than to the worth or merit of the result; nevertheless, so easily is the pleasure which is derived from astonishment confounded with that which we owe to merit, that our admiration is not withheld. There is at times but a very slight distinction between the expressions "how beautiful!" and "how extraordinary!" however widely the conditions which may call for the one may differ, on other occasions, from those which give rise to the other. Thus it is that in proportion as the style becomes lower, the difficulties to be contended with diminish; till, at last, a child who has an unusual share of daring, might

almost seem a prodigy, from the extreme facility with which he produces surprising results.

The highest styles of art are those, in which no assistance is borrowed from preparation, either in the materials or in the method employed, from regularity in the mechanical process, or from trickery in the manual part of the labour; and in which no colours are extended or concentrated, in order that some effect pleasing to the eye may be substituted for the truths of nature. The styles in which success is most uncertain, as it is most creditable, are those, in which the colours used have the degree of brilliancy, transparency, or substance, which is required in order to convey the most truthful impression of the subject; and where the forcibleness of the imitation depends consequently on substantial and positive workmanship, and not on the fascination of the beholder. In this respect, oil-painting seems to claim the preference over other styles; but water-colours, independently of other merits which oils do not possess, come very near to it, when, by successive colouring, and glazing, the white of the paper has entirely disappeared under a rich and transparent body of colour.

PRACTICAL REMARKS.

EXECUTION.

In historical composition, it is by various and successive processes that the primitive idea is made to ripen into the perfect work. A rough sketch, in pencil or crayon, is first made,—sometimes repeated over several times, with various alterations; from which it is usual to make a small picture in oils or water colours, having the colouring, as well as the effect of light and shade, which it is intended that the finished picture shall possess. Further correctness is obtained in a more finished drawing or cartoon. Modelling in clay is also had recourse to: it has the advantage of marking the relative position of every figure in a group, and the exact influence of perspective and foreshortening, giving the true projection to every limb.* The arrangement once made, the living model is introduced; whereby variety and nature are given to the features, ease and truth to the form and movements. The folds of drapery are taken from dresses worn by lay-figures. These precau-

* Lanzi informs us that Tintoretto was in the habit of making a great number of small figures of wax and plaster, which he dressed up, and lighted with strong lights, so as to obtain the true effects of chiaro-scuro. It appears that he formed, also, small houses or boxes, in which these figures were placed in various attitudes; and being lighted up through the windows, he observed the effect of the whole. Some he suspended to the roof, and observed them from various points, in order to obtain that kind of foreshortening called *sotto in su*. Paul Veronese and Coreggio appear, likewise, to have made great use of models. See Lanzi's "Storia Pittorica della Italia." Lives of Tintoretto and Coreggio.

tions are rendered necessary by the great precision required in painting the human figure, as well as by the difficulty of giving to the conceptions of the mind, the character and expression of life.*

EXECUTION IN LANDSCAPE PAINTING.

In the Landscape, the diversity and disconnection of the objects give to the arrangement of its parts the character of chance; and one form may often be substituted for another with almost equal advantage. Perfection thus bears a less definite character; and the progressive stages by which it is attained in historical painting, become superfluous in the Landscape. The original pencil sketch is, in many cases, the only guide to the painter whilst completing his work. Some, indeed, trace their ideas on the very board or canvas where they are definitively to remain, allowing full play to their fancy as they work on. One incident suggests another; and the difficulty of composing, or rather of inventing, is lessened. This plan may succeed in the unpretending drawing, however defective in the execution of an important work. It would be dangerous to rely too much upon the maxim, that nature is indefinite in her forms and combinations; for the principle which determines the connection between form and beauty, doubtless extends, in the landscape, far beyond those circumstances of relation which appear at the first glance: and it is only by long acquaintance with

* See "Expression in the Figure," p. 159.

her most beautiful forms and effects, as well as by the apprenticeship afforded by the study of the most perfect productions of art, that is acquired the power of selecting amongst the choicest materials presented by nature, and of combining them at once agreeably to the exigencies of fancy and to the rules of taste. How can it be expected that these results of time and labour will avail, in the rapid pencilling of those ideas which suggest themselves as the work proceeds? Moreover, art assigns, even here, a decided preference for certain forms over others, and adopts them as types of the picturesque. Some of these combinations may be partly conventional, yet they appear to have won the approval of art in all times and countries; and their superiority, though partly due to example and precedent, has remained uncontested.

A small coloured drawing of the subject, placed within sight, as the artist is engaged on his larger work, constantly draws his attention to the whole, impresses his mind with the general effect, and prevents his falling into that local and unconnected method of painting, which destroys breadth, and generates littleness and insignificance. The effect is much easier to give in a small unfinished sketch, than it is in a large picture; and when once marked in light and shade, or in approximate colouring, it is there as a reference, to prevent any falling off from the merits of primitive arrangement, whilst, at the same time, it does not preclude improvement. A preparatory sketch has, moreover, another advantage,—it secures simplicity. The objects forming the composition are enlarged, in the transfer to a wider canvas; the intervals between them are likewise in-

creased; but their number is not added to. Thus is obviated that redundancy and confusion which often result from the impatience of labour, which urges the student to fill up all empty spaces seeming to him too extended as he works close to the canvas, but which are sufficiently filled up for a distant view. When guided by our own disposition only, we are more inclined to accumulate and to condense, than to enlarge and simplify.

The enthusiastic student, absorbed in the interest which even the mechanical imitation of nature affords, is often too exclusively guided, in the execution of the picture, by the appearance of the limited portion of it at which he is working at the time; and in this kind of plastic labour, the prejudice and short-sightedness of an inexperienced mind, prevail over the truthful and stable impressions which are due to general results. This kind of routine should above all be avoided. The young painter who fondles over some object of fascinating interest, adding touch after touch, and seeing nothing but that which is immediately at the point of his pencil, would frequently require to be roused from his lethargy, and to be reminded that it is not for himself, but for others, that he paints. He should be aware that a foreign eye begins with the whole,—compares distant parts, effects of colouring, or indications of beauty and of action, on a large scale,—quite unconscious of the merit which the artist attaches to some unimportant portion of the work, from the unusual toil and labour he has there encountered. Whatever circumstances, therefore, tend to generalization, whether they depend on the style selected, or on

any particular plans which the ingenuity of the operator may suggest for disengaging his thoughts from local and temporary seductions, and for giving a wider range to his tool, would be highly desirable. It is rather a disadvantage to the artist than otherwise, that the situation in which his work is painted is, generally speaking, more favourable than any one in which it is likely to be placed afterwards; and he cannot be too well prepared to meet any future drawback of light and position, by observing the effect of his picture, before completion, under the most varied circumstances.

Elementary Studies.—With regard to elementary instruction, various plans have been adopted. The study of the human figure, especially of the head, has been recommended by some, as a key to almost every style; and the delineation of the separate organs and members has been regarded as the best preliminary step. Others recommend drawing from nature at the onset; and the eye is practised on solid geometrical figures, before it can adapt to each other the parts of a more complicated subject. Occasionally, both of these appear to be neglected; and the impatient genius of the young performer is indulged, by his being taught colouring at once: or he may be shewn a still more rapid way of attaining his object, by being informed that boldness and confidence are the secrets of practical success.

With the exception of these last maxims, so destructive to the talents which are acquired by patience and industry, each has its peculiar advantages; but every plan is ill-advised which adopts any one method of

teaching to the exclusion of all others. The drawing of heads affords, there is no doubt, great advantages in learning the art generally, owing to the precision which is essentially required in the delineation of every part which belongs to the human figure. Drawing from models having geometrical and other simple forms, must also prove highly useful in teaching the beginner to transfer figures having depth as well as breadth, to a flat surface, and to account for the various relations of advancing and retiring forms. But, in order to obtain efficiency in every point which contributes to the completion of a work, it is necessary that instruction of a very different kind be added to the precision which is gained by copying heads, as well as to the discernment which is acquired in studies which are made from solids or from the round. Projection is one of the chief points in drawing; but it is not all: and the youth who may be able to represent admirably, a cube, a pyramid, a jug, or a table, may be incapable of adapting various objects so as to form a graceful composition, or of finishing it up with that ease, lightness, and at the same time decision of the hand, which are acquired by diligent practice, and practice obtained on a sound principle of handling or working.

There are many parts, both of the figure, and of the landscape, especially in the trees of the latter, which cannot be imitated effectually without a certain conventional touch or method, which it would cost the student immense time and trouble to find out for himself; whilst the labour and acquired experience of the teacher place him at once, with regard to this mechanical imitation of

objects, in an advanced position, from whence other difficulties may be easily overcome, and merits of a higher order aimed at. Thus, if the first attempts from nature be made with simple objects, with a view to give practice to the eye in determining form and proportion, it may be well, at the same time, to copy from finished drawings and other works of art, those which, possessing more intricate forms, demand peculiar and special means of imitation. The use of method and sound principles soon renders easy the representation of the most diversi fied objects.

In the more advanced stages, which involve colouring, nature becomes an indispensable guide; but to go to nature at once, and without previous knowledge of the value and use of colours, would be something like endeavouring to decipher the meaning of an unknown tongue, without the previous acquaintance of its characters. It is only when the use and properties of colours have become familiar, that the guidance of nature may be safely trusted to; and her austere truths, instead of embarrassing, will inspire those general ideas, and give those strong and firm impressions of form and colour as connected with living objects, which result finally, in the power of composing and painting unassisted by models of any kind.

Faithfulness and circumspection, coupled with perseverance, are the best companions in every stage of tuition in art; but although it be desirable that the youthful artist be kept, with regard to his practical studies, within certain limits based on previous acquirements, lest he should chance to wade beyond his depth,

it is by no means necessary that he should be made to dwell on trivial and uninteresting subjects. The model should be an inviting one; and there should always be something held out as an encouragement for improvement. The inducement to correctness and accuracy should rest chiefly on the perfection and finish of the subject intended to be copied. With the best productions before him as examples, the mind of the student becomes gradually imbued with the principles which are necessary to perfection; till at length his taste and judgment are fitted for the appreciation of those transcendent excellences which have raised art itself to a glorious and dignified station.

Process of Painting used in Italy.—Having some time since put down, from memory, a brief account of the processes which are chiefly employed in Italy for painting the landscape, I have thought that such particulars might not be without interest to the amateur and to some of our native artists. Although the low estimation in which modern Italian art (especially the art of landscape painting) is held in this country, precludes any extensive adoption of such principles, it is not a reason why we should disdain to glean even from those whom we excel, or shut our eyes to things which afford some little to be approved of, though much to be censured.

It is usual to trace a sketch or outline in the first place, with chalk, pencil, or any substance easily effaced, in order to afford the greater facility for changes: but, when fixed upon, the outline may be repeated over with pen and ink, in order that it may not be easily rubbed

out when the colour is afterwards put in, as also that it may be seen through the first coating, and still serve as a guide. The colouring begins with the sky; and if there be few clouds, they are generally omitted in the first coating. Concentric or parallel belts of colour, according to the form of the principal focus of light, are then put in, in succession, one above another; commencing with the warm tint near the horizon, and working upwards. These layers are united together with a hard brush and a vertical motion of the hand; after which, the whole is blended. The landscape is then painted in lightly, with the exception of the trees which come in contact with the sky, and which are painted in afterwards.

It is desirable to put in the distant mountains when the sky is yet fresh, both in the first and second coatings; a practice which gives them softness. The degree of tone and finish of the first coating varies with the plan of the artist. Some put it in exceedingly light and thin,—a general warm tint rather than the approximate colour of each object. Others give to the first layer a tone almost approaching to that of the finished picture. In figures, I have seen copyists paint at once up to the colouring of the original; a method which the Italians, as before stated, designate "*dipingere alla prima.*" It consists in putting on the colour very thick and pasty; and requires only a few glazings in the finishing. This style demands great precision and firmness in the outline, and would scarcely seem practicable in composition, where repeated alterations cease only with the completion of the work.

The plan of giving a considerable degree of colour to the first coating seems to have some advantages, since proportionately less remains to be done in the finishing, and considerable time is thus saved. Its objections are, that unless it be perfectly understood what changes will be produced in the first colours, by those which come after, mistakes may happen as to their reciprocal influence, and it will be difficult to give to the picture the exact effect which it is intended to produce. By proceeding more cautiously from the commencement of the work,—by putting in light colours at first, and adding to their strength afterwards, when the definitive effect can be more easily foreseen, from the disappearance of the white canvas, the point aimed at may be attained with greater certainty and precision.

Warm tints are preferred in the first layer of colour, because they secure harmony. Grey or brown coloured canvas may be used; but the white or nearly white ground is preferred by some, in order to obtain great purity in the sky and aërial parts. A Milanese master noted for the clearness of his colours, considered that the least impurity in the preparation of the canvas would, by degrees, make its way through the superposed layers of colour, and diminish their brilliancy. These white canvases necessarily require additional labour in order to bring the picture down to a proper tone: the layers must be more numerous, or put on thicker.

Mountains seen through the vapours of the extreme distance, can scarcely be put in too light; but in the nearer planes, it is well to give them a firm and substantial colour, or they will appear excessively pale when

the remainder of the picture is worked up to its full tone.

The figures are either delineated at the same time as the other parts of the composition, and painted on the blank canvas, after the landscape has been put in, in colour; or they may be painted over the landscape. The last method presents many advantages for figures not exceeding two or three inches. It admits of a bolder and less restrained method of composing the landscape, than when the flow of the hand is here and there interrupted by the figures. If the figures come out on a smooth and uniform surface, such as the sky or water, the inconvenience of retouching, and perhaps of entirely repainting, is avoided, by putting them in afterwards. If painted first, they would be half effaced in the free motion of the hand which is required for smoothening the ground-tint; whereas, if painted over a perfectly dry back-ground, they may be washed out with oil and a soft brush, whenever their appearance, or the site in which they have been placed, is not satisfactory. The objections to this plan are, the influence which the colours used in the landscape may have in impairing those of the figures put over them; but this inconvenience does not show itself in figures not exceeding two or three inches, provided they be painted in substance twice. A more serious inconvenience with small figures is, that of a rough and unequal surface to paint upon, when the colour has been previously laid on in thick masses. When this is the case, the surface should be scraped smooth where the figures are intended to be put in.

It is usual to make a separate sketch in colour of the principal groups of figures, before putting them in. This is done principally for the purpose of obtaining precision and ease in the attitudes. Sometimes their situation in the picture, and relative proportions, are determined by drawing, or cutting out, small figures of the intended size, and affixing them for a time to the canvas. However, too much trial of effect, and comparison between figures in one position and in another, unsettles the mind, and lessens the innate feeling of the artist for that which is most picturesque or most tasteful.

In the methods of painting with which I became familiar in Italy, glazings of crimson and purple lakes are but scantily and cautiously used in the distance. Warm glazings are chiefly employed to give tone and vigour to the foreground. Those of bitumen, mineral browns, &c., are almost necessary for giving transparency to the shady parts. The effect is then natural. It is not perhaps equally so with the glazings of yellow lake at times abundantly used on open foregrounds. These certainly give great brilliancy of tone, and throw back the distance; but they have a tendency to render of a uniform tint the plants and foliage, which in nature show so much diversity; and they impair, perhaps, the freshness of the lights. A very bright and a very dark ground-tint are equally unfit for transparent glazings; but a sober warm sub-layer shows off the richness of the dark transparent colours which are put over it.

Glazings of light body-colour are used in the distance of landscapes. They are composed chiefly of white, with

a little toning of blue, or of vermilion and yellow. They increase the vapoury appearance of the atmosphere, and give distance to remote objects. Such thin layers of light colour require an unusual degree of attention to the purity of the vehicle used for extending them.

Handling.—Bent on the result, rather than on the method of obtaining it, artists adhere little to rule in the art of handling the pencil. A length of tool is recommended for giving freedom and ease; and a stiff brush is frequently preferred to a fine point, though more difficult to use. The flexible point of the beaver produces hard, the hog's-hair soft, outlines; and of either excess, the latter is preferable. Besides, all means are advisable which tend to counteract the stiffness which is natural to beginners.

Not unfrequently, negligence and daring are mistaken for freedom of touch. The latter is, however, easily distinguished, by character and a truthful resemblance to the object represented. A conspicuous use of strokes and touches is, in general, the mark of an inferior style. In the most perfect, the mechanism of the art disappears, and substance alone becomes prominent, in the various forms and aspects in which it is exhibited in nature.

The suitable degree of finish for a picture is a point on which tastes greatly vary. It is carried by some painters to such excessive minuteness, that a lens is not only used by the artist, but is also required by the observer in order fully to appreciate the elaborateness of the work. This extreme finish is advocated by some,

and apparently with reason, by the appearance of nature, the details of which become ever more minute and redundant, as the investigation is closer. Those, however, who recommend the lens, in order that the high finish of their work may be done justice to, seem to forget that nature is seen through it by naturalists only. The painter and the lover of picturesque scenery view her very differently. In a scene which would be comprised in a picture, the nearest objects do not, on an average, come within fifteen paces of the observer; a distance at which the minute fibres which constitute substance disappear, even to the keenest eye; and the forms of objects grow more or less indistinct to every observer, according to the narrower or more extended range of his vision.

Nature is, however, characterized by the variety of her forms and details, even when seen indistinctly; and, generally speaking, art is beneath rather than above nature, with respect to high finish, which has a wonderful influence on the beholder when not carried out at the expense of effect. Nevertheless, a free and bold style of painting compensates, by many advantages, for a want of fidelity to nature; and its combined softness and energy seldom fail to secure favour. However, the attractions of effect appear to have been, not unfrequently, overrated; the result of which is a coarse and negligent manner of painting. Artists who esteem effect more than correctness of form, occasionally go so far as to leave the outline of minor objects unconnected, as though by forgetfulness. Such instances of neglect seem unaccountable to the correct delineator, whose one-

sided views on this point prevent him from fully appreciating those qualities of a picture on which effect depends. On the other hand, the partisan of effect cannot enter into the feelings of the careful performer, who regards as a libel upon nature, the omission of the minutest of her details.

It is in such particulars as these, connected with any manner of painting, that the circumstances under which the artist has laboured, perhaps adverse, perhaps favourable, become apparent; and although it would be an unsatisfactory method of judging of the merits of a painting, to seek out excuses for its faults, its impartial appreciation requires that the causes which led to them, and the difficulties which have been contended with, should be known. Those extremes of roughness or of finish, which appear so inexcusable when considered to be the result of ignorance, or of inability to paint otherwise, are viewed with very different impressions when known to depend on a condition of the organ which causes nature herself to appear under an entirely different aspect to one individual or to another.

PART III.

COMPRISING

LINEAR PERSPECTIVE, PROJECTED SHADOWS, AND REFLECTION ON POLISHED SURFACES.

LINEAR PERSPECTIVE.

REMARKS ON THE PREVAILING METHODS OF TEACHING PERSPECTIVE.

PERSPECTIVE is generally understood to explain the influence of distance on the *colour* of objects, as well as on their *form*; and comprises, under the name of aërial perspective, all such effects of nature as are due to light, shade, and colour, modified by atmospheric influence: but having found it more convenient to consider these subjects separately in this volume, as well as in my unpublished work on the picturesque, I will here confine myself to a few remarks on that branch of perspective which especially regards the forms of objects, and which may be termed *linear*; not, indeed, that the forms or boundaries of objects, in nature, are defined by

lines, but because these afford the most effectual means of indicating the configuration or the various shapes of bodies, with the least labour. In nature, it is by transitions, and chiefly by those of light and shade, that form becomes recognizable.

It is, perhaps, an untoward circumstance in the education of youth, that the form in which Perspective is first introduced, is generally calculated to engender a distaste for it. Its dry and monotonous problems first make their appearance in connection with the fascinating occupation of drawing and painting, and seem to present an obstacle to easy and rapid progress. Its practice seems to confine the hand, and restrain the fancy, in the exercise of an art the pleasures of which naturally associate themselves with those of sportive uncontrol. But what seems more worthy of consideration is, that the methods of instructing usually adopted in this branch of art, tend, in fact, to form a stiff and constrained style of execution. For this reason, it might be wished that the study of it were made more philosophical, and its application more extensive and generalizing. Confined, as it frequently is, to the explanation of diagrams, its principles remain unconnected, in the mind of the student, with those prominent and characteristic features of nature, to which they so admirably apply; as the rules of syntax, when learned by rote, generally remain unconnected with the practical use of the tongue which they were intended to teach. The knowledge of perspective might be made to extend to the ideas and mind, that precision and nicety in the appreciation of forms, which,

in its present stage of advancement, it bestows almost exclusively on the sense of vision.

It has been remarked, and not without foundation, that mathematical study tends to chill the warm impulses of the heart, and to arrest the natural flow of kindly and amiable feelings. It must, however, be allowed, that this aphorism can hold, only when applied conditionally, and with certain restrictions. Definite and precise studies, like all others, become prejudicial, when rendered too exclusively absorbing, and not when they call but for a due and reasonable share of attention. Any pursuit which tends to give precision to our impressions concerning the relations of things, as well as certainty to our appreciation of events, deservedly claims a large share of our attention. If the emotions which proceed from the heart, or from spontaneous impulse, were always characterized by a beneficial tendency, we should be right in disregarding at once any pursuit or study calculated to restrain or influence them; but, when unguided by reflection and reason, such outpourings, even when the moving principle is pure, are in general characterized by the most ephemeral and uncertain results. What orator, though he should speak from the effusion of his soul, can make sure, even for a day, of the consequence of the principles which he confidently and strenuously asserts? And to what incalculable evil does not at times lead, the slightest mingling of passion with the spontaneous effusion of internal emotion! Were reflection and thought never overpowered in the unguided enthusiasm and boundless exultation which

accompany the enunciation of feelings wrought up by the circumstances of the moment, what dissensions might be spared, and what untoward events might receive a timely check! It would be taking, therefore, a false view in this matter, to deprecate unconditionally and unrestrictedly every precise study, upon the ground of its having a withering influence on the tender and sociable emotions. When accompanied by a due admixture of the glowing fervour of an expansive soul, and when occasionally moistened by the fertilizing dews of an overflowing imagination, these pursuits have but their just and rightful influence. They are thus made to direct, and not to stem, the tides which flow from the heart. Perhaps that kind of application of the exact sciences possesses peculiar advantages, which does not unnecessarily confine the impressions to small and disconnected signs and figures, but which, taking the forms and aspects of nature herself as illustrations, expands the ideas, and opens a free and extensive range for the reasoning powers of the mind.

The universal application and usefulness of the laws of radiation, on which perspective is based, are but very indifferently appreciated; nor does this comprehensive principle share, to its due extent, the admiration which is so justly awarded to the organization of the eye; although, without that progressive apparent diminution of objects by distance, which is associated, in the inverse ratio, with the diffusion of the rays which reach the eye, sight itself would become inferior to the sense of touch, as a means of appreciating form. Every object would become an obstacle to the perception of another situated

beyond; and our position would be similar to that of one feeling his way in the dark, from one body to another in succession, instead of grasping as it were at the same instant, a world of living objects.*

* The diminution which takes place in the intensity of the rays of light which are emitted or reflected from the surfaces of bodies, is commensurate with its diffusion through space in the ratio of the squares of the distances, although each single ray, considered independently of the influence of the atmosphere, and of all volatile matter, is subjected to no decrease of power whatever be its extent; so that, supposing the eye were to receive but a single ray of light from each object, its intensity would appear the same at all distances, subtraction made of atmospheric and other influences. This is concisely proved in the extracts made by Mons. Brisson, from the papers on "Shadows and Perspective," by Mons. Monge; who observes, with regard to the light which is radiated from objects to the eye of the observer, "that if it were to traverse a space entirely free, and offering no resistance, two bodies, luminous in an equal degree, would continue to appear equally so at whatever distance they might be situated. In order to be convinced of this, (continues the author) let us suppose two circles of equal diameter, equally lighted, and having the same inclination with regard to the visual ray. The intensity of the light emitted by each, will decrease in the inverse ratio of the squares of the distances; but, at the same time, the size of the images projected by these circles on the eye, will appear to decrease in the same ratio. So that if, on the one hand, the light radiated from the whole surface of one of the circles, when removed to a distance, is less intense (less in quantity in a given area), it is, on the other hand, condensed into a smaller apparent compass. These two results taking place in the same progression, counteract each other, so as to give rise to the impression which we experience, namely, that the two circles placed at unequal distances, appear to have the same intensity of light."—(See p. 172 of the "Géométrie Descriptive" of M. Monge, 5th edition.)

To this, the substance of the remarks of M. Monge, it might be added, that a small portion of surface detached from a large one near the eye, is circumstanced similarly, with regard to radiation, with a large surface at a distance, since it fills up the same apparent space. The number of its rays passing through any given spot or area, would be less numerous than those of the large surface from which it has been separated, in a proportion corresponding to its limited extent; yet no one would suggest that a small portion of a surface having a given degree of colour, or of light, would appear, excepting from the effect of contrast, less of that colour, or less lighted, than the whole of the surface before being divided.

Developement of the Principles of Perspective. —Whenever we look around us, whether in open places, or in more confined spots, we perceive that all the objects, by which we are surrounded have certain relations of form with regard to one another. What first strikes us is, the distinctive nature or character of the objects, which these relations seem to point out, relatively to their use or purpose. But, at the same time that the expression of individuality is conveyed by these relations of form, we discover, if we consider the prospect at large, as a whole, and not in separate parts, that something more is expressed by these relations; and that, combined with the individual character of objects, correct impressions are obtained of their distribution and arrangement. We judge, without hesitation, of the intervals of space which separate them one from another, and of the direction of their greatest extent, north or south, to our right, to our left, or in front of us. Thus, *character*, *position*, and *distribution*, are involved in the same impression which is conveyed to the mind by sight. The former, which opens the way to physiological investigation, belongs to the descriptive sciences; the two latter depend on those principles of optics which it is the object of perspective to elucidate, and to place within the compass of practical processes.

The natural laws which are generally admitted as principles of perspective, are based on the progressive apparent diminution of objects as they recede from the eye, in the inverse ratio of the squares of the distances,

for direct recedence; but which the unequal degree of vanishing of various objects, according to their position, subjects to further modifications. Every object in nature, whether regular or irregular in shape, is alike subjected to the influence of this principle, to its whole extent, and with the same rigorous application of it: but, with regard to irregular forms, this perfect subordination and obedience to perspective rule, although it equally exists, does not strike the eye; for, as before observed, the principle which points out differences of position is, in the appearances of nature, so intimately connected and blended with the characteristic forms of objects, that the effects due to the one, are, in irregular bodies, most easily attributed to, and confounded with, the results of the other. For instance, with regard to trees, or to the unevennesses of the soil, the eye does not inquire whether such and such an appearance be due to the real size and form of the masses of foliage, or to the projections and depressions of the soil, or whether it be due to those conditions which depend on greater or less proximity, or on a degree of more or less decided obliquity of the surfaces, in reference to the position held by the observer. By that tuition of nature which corrects all misconceptions with the gradual increase of experience, we are enabled to judge, with tolerable precision, of the true form and position of objects, by their apparent relations; and, in imitative art, a similar kind of tuition, based on the experience of the eye, suffices to enable those who follow this pursuit, to attain, with regard to the *irregular* forms of nature, a degree

of perfection and approximation to truth, which appears fully adequate to the purposes intended. If, through ignorance of the laws which govern the recedence of objects, a hill be made to appear higher or more precipitous, or the leaves of a tree larger, broader, more elongated, or more round, than would be consistent with the precise nature of these objects, could their dimensions be taken mathematically,—who would think of objecting to the performer, that he was unskilled in perspective, rather than in correct drawing in general; and that, in consequence of the position marked out for the observer, the hill must appear less lofty, or less precipitous, or the leaves of the tree smaller, less broad, or less elongated? Would not such particulars as these appear trifling minutiæ, undeserving of the artist's attention; and that, because there may be hills of all heights and of all degrees of steepness, and leaves, speaking generally, of all sizes, of all lengths, and of all widths? It appears therefore evident that, with regard to the imitation of *irregular* objects, or of those which are not limited to any precise and constant form, that degree of accuracy which results from the natural tuition of the eye, with practice and observation, but without rule, fulfils every purpose which is in general expected or required.

But is this the case with respect to *regular* objects, —with regard to those forms which extend to considerable distances in one given direction, with equal divisions, and corresponding parts, of which most buildings afford examples? Is it not evident that a certain nicety and precision, in the imitation of such objects, cannot be

dispensed with, without producing apparent error and falsehood? A range of houses, of which the roofs were to rise gradually from one end towards the other, or of which the windows were made progressively smaller, further apart, or not level, would be so extraordinary an instance of building, that neither the eye nor the mind could admit the possibility that the houses were ever constructed on such a plan; and, in the representation of them, the error would be laid entirely to the charge of the delineator, the more directly in proportion to the degree of absurdity of the effect produced, rather than to the amount of deviation from truth. A street is sometimes seen to contract, or to widen, towards one of its extremities; which would require, in the representation, an unequal convergence of the lines: but even in this case, the improbability of this deviation from parallelism, in a street in other respects regular, would be weighed against the skill of the artist; and, unless to those who were acquainted with the spot, the mistake might very likely appear his. Wherever, therefore, objects are regular, or expected to be so, certain methods must be resorted to which will give to the portraiture a degree of precision, and resemblance to the subject portrayed, much greater than can be obtained by any habit of observing and comparing, unassisted by rule.

It has been discovered (and I will not here inquire into the origin of the discovery), that a certain mathematical uniformity of convergence may be superadded, in the delineation of symmetrical forms, to the primary and characteristic indications of regularity, in order to

give them the appearance of being subjected to that progressive optic diminution which, according to the laws of radiation, results from distance. The methods which are usually adopted in practice, answer, in general, all the purposes required; and when, by the mere perspective convergence of the principal lines, and the progressive contraction of the parts, the idea of a street or avenue retiring from us is rendered on a flat surface, we are struck with the resemblance to nature, and with the delusiveness of the effect.

So far, the means adopted appear adequate, and their application easy and almost self-evident. But the principles of perspective are not applied exclusively to objects retiring directly from the eye. Surfaces frequently recede in a more or less oblique direction; they have sides which are at right angles with those which recede: and it then becomes frequently a question and a matter of doubt, whether, and to what extent, the surface at right angles with the one which recedes indirectly, should be made to converge on the plane of the picture,—whether, and in what cases, objects placed at intervals, retiring to the right and left, should be drawn progressively closer together as they become more distant, as would necessarily be the case with objects retiring decidedly into the picture.

With regard to points like these, many are perplexed at the appearances afforded by nature, even before they attempt to transfer these appearances to a plane surface. For instance, a person placed in a long gallery, observes the lines which mark the floor and the roof to converge, and the various partitions and divisions to

contract, towards one of the extremities. He turns in the opposite direction, and observes there also, that the horizontal lines converge, and that the vertical spaces contract. But when he turns towards the wall, allowing the gallery to retire on his right and left, he perceives no kind of angles where the lines unite; all the divisions or boundary lines are straight and horizontal. In the same manner, an observer who places himself in the interior of a tower, knows the lines which form the sides to be vertical,—perpendicular to the surface of the earth; he is even satisfied that they appear so, provided his eye compass but a short interval of space. But if, the tower being high, he looks up to the summit, he observes that the sides appear to contract, and the lines to draw closer together; till, if the tower be very lofty, they almost seem to meet. But the habit of witnessing these delusive effects, associated with the knowledge that the gallery before him, or the shaft of the tower above him, does not really contract, but remains of an uniform size throughout, suffices to prevent him from considering either as a thing unusual, or the explanation of which involves difficulties.

In order to take a general and unprejudiced view of these perspective phenomena, it would be desirable to divest one's self of the confined impressions which almost necessarily result from the practice of delineating objects on plane surfaces; for it can scarcely be doubted, that the habit acquired from our earliest attempts at drawing, of judging of the forms and relative positions of objects in connection with the surface on which we represent them, infuses partial and confined ideas with

regard to their relations in nature and space. Certain formulæ and conventional methods greatly facilitate practical imitation, and are almost indispensable to it; but when, from the circumscribed sphere of operation in which we become thus engaged, we cast a glance on nature at large, and endeavour to determine the forms there exhibited, by their relations one to another, we find that the principles which have been acquired by constant reference to practical theories, have obtained a stronger hold than we have been aware of, and that it becomes necessary to shake them off, if we wish to judge of the appearances of nature unbiassed.

Perspective, not technical, but general and descriptive, would be based on the relations of individual points, or of various lines, as marking the positions of surfaces in space. The lines which serve to mark the most regular forms in nature, are not very numerous. Right lines and curves might be used to trace most of their leading boundaries. Let us consider the nature of the right line, the most prevalent of all, and the definition of which is moreover necessary for the explanation of the perspective of the gallery above alluded to, as well as of the tower.

The right line is represented by a segment of a circle, or of any simple curve, the plane of which is occupied by the eye of the observer. In descriptive geometry, therefore, any right line is equivalent to a simple curve correspondingly situated in space, and in the plane of the eye. For instance, if a person, situated on a large plain, or at sea, takes a circle, (we will say a hoop, to make it more familiar), and, placing himself in the middle, raises it to

the level of his eye, he will find that it will correspond exactly, and in every point, with the terrestrial horizon. This being granted, I will suppose that he places himself between two right lines, or, in familiar terms, between two straight rods, parallel with each other, on a level with his eye, and which we may imagine to be extended indefinitely at both ends. He will perceive that each rod will correspond exactly with one half of the natural horizon; that the points where they appear to meet will be at 180° from each other; and that the two right lines combined, will thus be equivalent to, and correspond with, the entire circle formed by the natural horizon.

So far, the horizon, the hoop, and the two right lines, become identical to the eye situated in the midst. If, now, the hoop be raised from the level of the eye of the observer, to an elevation more or less considerable above it,—four feet, for instance,—its appearance will be that of a circle of less extent than that of the horizon, and measuring from every point an equal number of degrees above it. Let us now see whether the two right lines, or straight rods, placed in a similar position, will correspond, as before, with the circumference of the circle. It will be found that, instead of presenting, as it does, an equal number of degrees with the horizon at every point, they will subtend that number of degrees at the point only where they come nearest to the eye of the observer, that is to say, where they cross the spot occupied by him; and that, from thence, they subtend from the horizon, a number of degrees progressively diminishing until they meet it conjointly, at the opposite points of the compass.

Straight and horizontal lines therefore, raised above the level of the observer's eye, no longer correspond with the circumference of a circle placed horizontally at the same elevation, but form the boundaries of inclined planes which intersect the horizon at the two opposite and corresponding points, and whose axis of inclination is at right angles with these points. But if the straight lines, in the position now described, thus differ from the horizontal circle there situated, will they equally differ from a circle the circumference of which attains the same elevation, but which is inclined towards the observer in such a manner that his eye is in the plane of its inclination? If the former proposition, that a right line corresponds to the segment of a circle in the plane of the eye, when on the same level, holds good, it will apply equally to a circle raised a given number of degrees above that level, provided it has the same relation to the eye of the observer; and I think a little reflection will make it evident, that the horizontal line elevated four feet above the level of the eye, and the circle reaching to the same point at its greatest elevation, and so inclined that the eye of the observer corresponds with the axis of its inclination, must appear, as to the correspondence of all their parts, identical. Right and horizontal lines, therefore, elevated above the level of the eye, are equivalent to segments of circles, or of curves, of which the axis is in the plane of the eye. The greater the angular elevation of the horizontal lines, the greater would be the inclination of the planes of which those lines, or the curves corresponding with those lines, might be supposed to form the boundary; until, if, by successive degrees of

elevation, we reach the zenith, and suppose it to be traversed by a right line extending horizontally over the observer, it will be found to correspond with the circumference of a vertical plane, intersecting the natural horizon at right angles, and at the same opposite points as all other lines parallel to it, or as all other inclined curves having the same axis of inclination.

It is, therefore, the property of all parallel horizontal lines which are not on a level with the eye, to unite together, as well as to meet the natural horizon, at their apparent extremities, or at the points which are remotest from the eye; and to subtend the greatest apparent elevation above the horizon, as well as the greatest intervals between themselves, midway between their points of conjunction with the horizon, or at the point which is nearest to the eye of the observer. What applies to horizontal lines, applies likewise to vertical lines, but with reversed relations. Thus, all vertical lines, as well as all vertical curves, the axis of whose curvature passes through the eye of the observer, intersect the line of the natural horizon at their centres, or at the point which is *nearest* to the eye of the observer; and meet at his zenith and nadir, the points the most *remote* from the horizon. If this present no great difficulty to the understanding, when considered abstractedly, there seems to be no plausible reason why it should, when the same principles are applied to those forms and appearances which come under our frequent observation. The parallel horizontal lines may easily be supposed to be those which, in the perspective gallery before alluded to, mark the meeting of the roof and walls, as well as of

all the other longitudinal compartments of the gallery: and if, in our abstract impression, we are satisfied that all horizontal lines are equal to curves which meet the horizon at both of their extremities, and subtend the greatest angular elevation from it at their centres, or at equal distances from the two points of conjunction with the horizon, so, in the case of the gallery, and indeed of every apartment in which we have long horizontal lines to deal with, there is no reason why we should not consider these as the equivalents of curves of which our eye is situated in the axis of curvature.

With these views, the terms of ascent and descent to the point on the horizon, technically called the point of sight, become conventional. The boundary lines of an apartment, as well as curves which are inclined in the plane of the observer's eye, present the greatest elevation relatively to the horizon, and the widest intervals with reference to one another, midway between their two points of conjunction. The apartment acquires its greatest apparent developement at this point, because the intervals which separate the parallel lines, or their corresponding concentric curves, are here greatest. If the lines did not in appearance possess these properties, they must cease to be right lines; and should such lines still be represented by curves, they could no longer be curves in the plane of the eye, but would deviate more or less from that plane. In the case of the tower, its interior appears likewise to have the greatest developement where its parallel vertical lines present the greatest intervals, and to be most contracted where these intervals become apparently least. As, however, vertical

lines extending to a great elevation are met with, in nature, less frequently than parallel horizontal ones, it is less often that difficulties arise from the representation of objects in which such vertical lines occur.

If, after these explanations concerning horizontal, as well as vertical lines, it still be asked, why a horizontal straight line which is above the level of the eye, appears to ascend from its extremities to the point which is nearest to the observer, it must be answered, that it is an inherent property of the right line, so situated, to do so,—such is its invariable relation to the horizon, or to a right line which corresponds with the horizon. The apparent declination of lines so circumstanced, is a fact analogous to the apparent straightness of curves of which the eye of the observer corresponds with the axis. It is, in fact, but the converse of this problem. If the difficulties which arise in art, from the apparent convergence of right lines, are more frequent than those which result from the apparent parallelism of curves under given circumstances, it is because right lines are of more frequent occurrence, in delineating natural objects, than are curves which are in the plane of the eye. To the painter of panoramas, the difficulties which are connected with this question must be far more practically great. With him, all straight lines which are not vertical, or which are not on the same level as the eye of the observer, are represented by segments of curves. A straight line below the horizon, but parallel to it, would be represented, if continued on the cylindrical surface of the panorama, by an ellipse, of which the line of the horizon would form the small axis; as also, the

right lines of level objects situated above the eye, would be represented by segments of ellipses, which would intersect the line of the horizon at the two opposite points of the circular picture.

I will now proceed to the *intersections* of right lines. If it be evident that right horizontal lines, having one direction, for instance that which corresponds to north or south, would all meet at the natural horizon at those two points, and present the greatest relative divergence, that is, the greatest elevation above the horizon, and the greatest depression below it, midway between them, it is likewise evident that the same will occur with regard to lines extending east and west, or at right angles with the former. Now, as such of the lines extending north and south, and of those extending east and west, form the greatest angle with the horizon, as have the greatest apparent elevation above it (at their centres), and the smallest angle with the horizon, as are the least elevated above it; so, likewise, with regard to any angles which might occur by the intersection of these lines, such as result from the lines which are most elevated, namely, which come nearest to the zenith, will be greatest, and such as result from the intersections of those lines which are least elevated, or which deviate least from the line of the horizon, will be smallest.

It will further appear that all horizontal lines which are intermediate between those extending north and south, east and west, as before mentioned, will present the smallest angles of intersection with those lines from whose direction they deviate least, and the greatest angles of intersection with those lines from the direction

of which their own differs most. As, for instance, lines running north-east and south-west, at corresponding elevations above the horizon, would present smaller angles, at their intersecting points, with lines extending east and west, than would do corresponding lines extending north and south: and this increase or decrease of the angles of intersection, would be proportionate to the deviation of the intersecting lines from, or to their approximation to, parallelism.

Now if it be true that lines encompassing spaces or surfaces may convey to us the impression of the form, as well as of the direction, of those spaces or surfaces, and consequently of the bodies with which they are connected; it will be evident that there must be certain conditions which are common to the lines above alluded to, which are all right lines, and to the right lines which encompass or circumscribe regular objects. And again, since the direction of the lines alluded to has reference to, and indeed is indicated by, the angles of their intersections, so the relative directions of all surfaces pertaining to regular bodies would be indicated or expressed by the angles formed at their accidental or apparent conjunctions. Any deviation of a line from its primitive direction, by causing a disturbance of its previous relation to other lines, would alter, in a proportionate degree, the relation of the surface or object to which it belonged, with other neighbouring surfaces or objects.

Now a picture may itself be considered as one of these regular objects: its top and bottom are bounded by right horizontal lines; and their relation to all other horizontal lines which might come into contact with

them from various directions, must necessarily be included in those general conditions, relatively to their angle of conjunction, which have been shown to apply unexceptionably to such classes of lines, without any reference whatever to the purposes or objects with which they are connected. But if the border or frame of a picture be subjected to the laws of recedence which govern all other regular objects, any right lines which may be included within that frame or border, that is to say, which are traced on the surface of the picture, will be likewise subjected to them, and have conditions common to all other right lines. One of these conditions, which it is here particularly necessary to bear in mind, is, that the perspective inclination of parallel horizontal lines toward the horizon, as also their angles of intersection with those which have dissimilar or contrary directions, do not depend upon the real elevation of such lines, but upon their apparent or angular elevation with reference to the eye of the observer. So that lines having a yard, or only a foot, of actual elevation, at a point near the observer, would be circumstanced, with regard to their perspective appearance, identically with lines having a real elevation above his eye, of ten feet, or of ten yards; provided their horizontal removal were such, that the elevation of ten feet, or of ten yards, of these lines, would not subtend a greater angle from the horizon, that is to say, present a greater *apparent* elevation, than would the lines raised only one yard, or one foot, above the eye of the observer, on a close surface. This is proved by the reduced model of a house, or of any other object, which is

seen from a given point, and with one eye, through a transparent medium; and which presents, with mathematical precision, the same perspective phenomena, as would a house, or other object, of the usual size, if placed at a relative distance. The lines which appear to intersect the transparent surface, may therefore alike express a large and remote object, or a small and near one. Their relations to the boundary lines of the surface through which they make their appearance, are in both cases the same.

From the circumstances already referred to, namely, that the picture is subjected, as well as any portions or divisions of the picture, to the same perspective influence as all other objects in nature, and that horizontal lines having a determinate angle of elevation above the horizon, are similarly circumstanced, whatever be their real height and distance, results the faculty which we possess, of giving to objects delineated on a plane surface, the apparent forms of those which are situated at all distances, and whose surfaces have various directions. The picture, it is true, is a quadrangular object, and, as far as its external shape or boundary is concerned, affords us little means of imitation: but we have the power of marking, and cutting out as it were, certain portions of its surface; which, being transferred by the imagination to a distance, and identified in appearance with the surfaces of real objects, are made, by ingenious adaptation, to represent correctly, those sides of the objects whose direction is the same with the plane of the surface or picture which we have appropriated for this purpose. Every near surface thus portioned out, and

cut into a determinate figure, serves to match some distant surface of the same shape; but this will hold so long only as the distant and the near surfaces are parallel. Were a picture soft and malleable, like clay, we could mould the representation of an object into any shape; and, as the direction of the surface might then be made to correspond, in every part, with that of a given object, a small but near figure might be made to appear to the eye, the exact fac-simile of a large figure placed at a greater distance. A small bronzed image of Apollo, might, with very little artifice and adjustment of neighbouring objects, be made to impress on the mind of the observer, the appearance of the Colossus of Rhodes, in its full proportions. No contraction of some of the parts, and extension of others, would be necessary. The representation, on a reduced scale, would be complete; but as the gigantic proportions would be wanting, these would have to be feigned, as it were, by correlative appearances and arrangements, calculated to act upon the imagination, and to delude the senses.

But, in imitations with the pencil, where we have but one surface at our command, instead of a variety of surfaces, all those lines of the object intended to be represented, which are not in the plane of that surface, must be counterfeited. The surface of the picture cannot be bent back where that of the object is turned away: therefore, allowance must be made for the influence of this change of direction on the boundary lines of objects, by so regulating, on the surface of the canvas, the lines which express these receding forms, that they shall have the same relations to those which

define the parallel sides of the object, in the representation, as we discover them to possess in the real object.

A prevailing principle in the delineation of objects on plane, and indeed on all uniform surfaces, is therefore *compensation.* The picture or surface on which we operate, furnishes a plane corresponding to those surfaces or sides of objects, which are directly facing us. All the lines pertaining to these sides of objects meet, indeed, with their exact equivalents, without any compensation being required, on the parallel surface of the picture; but with regard to the sides or surfaces of objects which recede, as we have not their equals, and cannot match them in substance, we are obliged to make allowance for this difference of direction, on the single plane surface to which our operations are confined. We give to the lines which are intended to express the form of these retiring sides or surfaces, the same relations to the lines of the parallel plane, as those retiring surfaces would possess if real; and by thus producing artificially, on one uniform plane, those results which, in nature, are due to various planes, we impress upon the eye the semblance of those forms whose relations to our plane of operation would be exactly conformable to those of the signs employed to represent them.

We possess, in those geometrical formulæ which are usually employed for illustrating the principles of perspective, the means of rendering, with the greatest precision, the apparent forms of objects, on a flat surface. The dimensions and distance of the objects to be represented, once correctly given, we could vie with the

accuracy of a tracing from nature herself on a transparent surface; but the acquisition of these simple and beautiful means for correct delineation, which science affords, frequently becomes embarrassing from our imperfect knowledge of the relations of forms in space, or of descriptive geometry in the scale of nature. They are tools, the very excellence and perfection of which perplex us, and render us sometimes doubtful as to the mode and extent of their use and application. The student who may have commenced, with the greatest accuracy, the outline of a building, forgets, perhaps, on his return to finish it, the relative position of his drawing. He nevertheless endeavours to complete the work upon the plan commenced: but should any difficulty present itself, respecting the parallelism, or the convergence, of the lines of the different parts of his building, he would soon find himself at a loss how to proceed; unless, remembering that he had shifted the plane of his picture, he were to recommence his work on a new plan, or to replace himself in the same circumstances in which he was before situated with regard to the object. And in this, the rules of perspective, in their most usual forms of application, would little assist him, unless he united with these, the knowledge of the general relations of lines and surfaces in nature. In order to apply this theory of perspective philosophically, he must consider the lines pertaining to the objects in nature to be as definitively and invariably related to those of his picture, as they are to one another in the real natural object. All those ideas which are connected with the picture as they would be with a moveable piece of fur-

niture, must be abandoned. That degree of precision which is obtained by tracing the outlines of objects on a transparent medium, lasts as long only as the direction of the transparent plane remains unaltered. Cause the least deviation to take place in the direction of the transparent plane,—and the lines traced, and those projected by the object, will no longer agree. The distortion is as complete as though the real object were twisted by some extraordinary convulsion, and distended into forms which it never possessed. It is only when the lines, being indelibly fixed, are observed independently of those of the object beyond, that the direction of the whole surface may be altered, provided the relative position of the eye of the observer be maintained; for, as the lines which serve to indicate the object would then preserve the same relations with the boundary lines of the surface, their truth and correctness, as a portion of the scene or picture included in those boundary lines, would remain undiminished.

The images in the looking-glass, which appear correct, both as to their perspective, and as to their relation with the real objects, do not, like the traced or painted representation, remain stationary, when its position relatively to the objects, or to the observer, is changed. If the mirror be fixed, the images move as he moves, and adapt themselves to his point of sight; or, if the mirror be transportable, the reflected images adjust themselves to every new position of the glass. Such being the case, how can it be expected that the picture, with regard to which the continual shifting of the observer incessantly alters his relations, as it also does

the relations of the painted representation to the real objects, can continue to remain, as an imitation, truly and permanently like, under these various circumstances? Between this mobility of the images, as they appear in the mirror, and those permanent and unalterable signs which are used in the arts of drawing, one might fancy, and this not without some foundation, that there is a certain degree of adaptation of the visible forms of objects to our habit of appreciating them,—some concession, depending on our imperfect apprehension of the relations of form and space, which renders those images which are inflexible and indeviable in the drawing, sufficiently yielding to accidental circumstances to appear natural.

I will endeavour to show, in general terms, by what process the geometrical accuracy of perspective is usually applied to the art of drawing; and afterwards consider to what extent this rigorous precision may be adhered to in practice, and the flexibility and docility by which it is tempered may be allowed to prevail. The position in which a picture is usually and properly placed, immediately opposite the eye, is that in which its surface, or any surface parallel to it, is subjected to the least perspective diminution. This enables the performer to give to all objects, even such as are seen in front, and with the fullest developement, their entire apparent dimensions in the least possible compass. The diminution to which they become subjected, when they are represented to recede, furnishes him, as it were, with considerable elbow-room for the distribution of them; but another condition of the principles on which he

proceeds, supplies him with the means of appropriating to himself space, still more abundantly.

The greatest possible extension of surface which, in the scenery of nature, is comprehended in any given angle of vision, is invariably transferred to that portion of the canvas, or surface of operation, in which the same angle represents the least extent of surface, or includes the smallest amount of space. This is satisfactorily shown by the line or level at which all horizontal planes meet the perpendicular surface of the canvas of operation; for it is at the horizon, the most distant point at which we are able to discover the surface of the earth, that equal spaces appear most contracted to the eye, and objects most crowded together; whereas, it is at that portion of all vertical surfaces, whether near or remote, which exactly corresponds to the horizon, that the smallest real spaces fill up the greatest apparent compass, and that a given angular extent comprises the fewest objects, provided they be disseminated in the direction of that plane. Consequently, it is in that portion of the vertical plane which corresponds with the vanishing boundary of horizontal surfaces, that is to say, with the eye's level, that the greatest extent of scenery occupies the smallest space, on the board or canvas.

The vanishing boundary of those receding surfaces which, instead of being horizontal, are vertical, likewise corresponds to the point where the visual ray falls perpendicularly upon the upright plane of the picture; and with regard to these surfaces, similarly with the horizontal ones, the greatest spaces in the scene represented,

are transferred to that part of the canvas where the smallest spaces have the greatest apparent or visual amount. Owing to these peculiar relations of surfaces which extend in various directions, we are enabled to condense into a small compass, planes and objects having, comparatively speaking, boundless extension; whereby the smallest picture or drawing is rendered the exact equivalent of the most expansive scene, provided its situation with regard to the eye be proportionate to its dimensions.

With regard to the circumstance that the natural horizon, or extreme boundary of any open prospect, always corresponds with the level of the eye, it does not depend on any perspective property connected with it which is not common to the boundary of any other plane surface. What gives the horizon so much importance in drawing, is the great prevalence of level surfaces, consequently of horizontal lines, over all others; the recurrence of which is, in all cases, more or less directly connected with the uniform level of the earth's surface, taken as a whole. Whatever lines, not horizontal, extend in one uniform plane, have likewise their horizon, as they have their vanishing point whenever they are parallel to one another. The lines which mark the inclination of a roof, have their vanishing point at a great angular elevation above the natural horizon; as, on the other hand, all lines which correspond with a descending slope, meet at a depressed point of convergence. But the circumstance that convenience, as well as an appearance of order and propriety, require that the greater proportion of the straight lines of build-

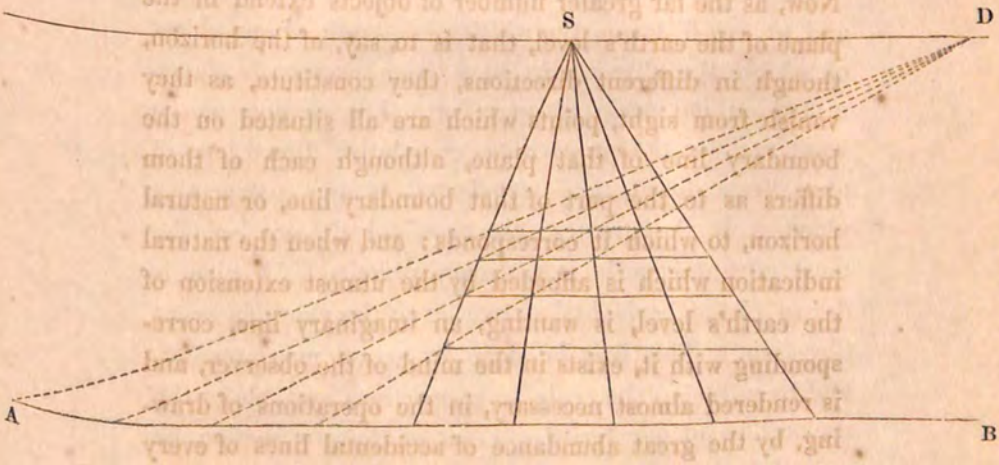
ings should be horizontal, gives particular importance to the line which always corresponds with the land or sea boundary itself, when visible.

The dimensions of objects are measured by the angle of divergence of the rays which, from their circumference, reach the eye of the observer: and whenever these objects are so distant, that the rays from their opposite sides correspond, and form in appearance one, they become a point; a geometrical point being the extremity of a line, the direction of which corresponds with the visual ray. In whatever direction the objects, thus reduced by distance, are seen, they form points to which all the forms of nearer objects, extending in any corresponding direction, appear to converge; and all objects which recede in one plane only, form (although they should extend in every possible direction of which that plane admits,) a series of points in the extreme distance, constituting the boundary line of that plane. Now, as the far greater number of objects extend in the plane of the earth's level, that is to say, of the horizon, though in different directions, they constitute, as they vanish from sight, points which are all situated on the boundary line of that plane, although each of them differs as to the part of that boundary line, or natural horizon, to which it corresponds: and when the natural indication which is afforded by the utmost extension of the earth's level, is wanting, an imaginary line, corresponding with it, exists in the mind of the observer, and is rendered almost necessary, in the operations of drawing, by the great abundance of accidental lines of every description, extending in the same plane.

Application of the Theory of Perspective. — We will proceed to examine the practical methods of accounting for the perspective influences to which receding objects are subjected. One of these influences, the primary cause of all perspective phenomena, is the progressive diminution which results from direct removal; being, as already stated, in the inverse ratio of the squares of the distances. The other, which is determined by the unequal influence of this diminution, depends on the different degrees of obliquity under which the surfaces of objects are seen.

Now the first result, namely the diminution due to direct recedence, is obtained, on the plane surface technically called the perspective plane, by simply drawing lines from a base A B (see Fig. 1.) parallel to the observer, to a common point or apex S, opposite the eye,

Fig. 1.

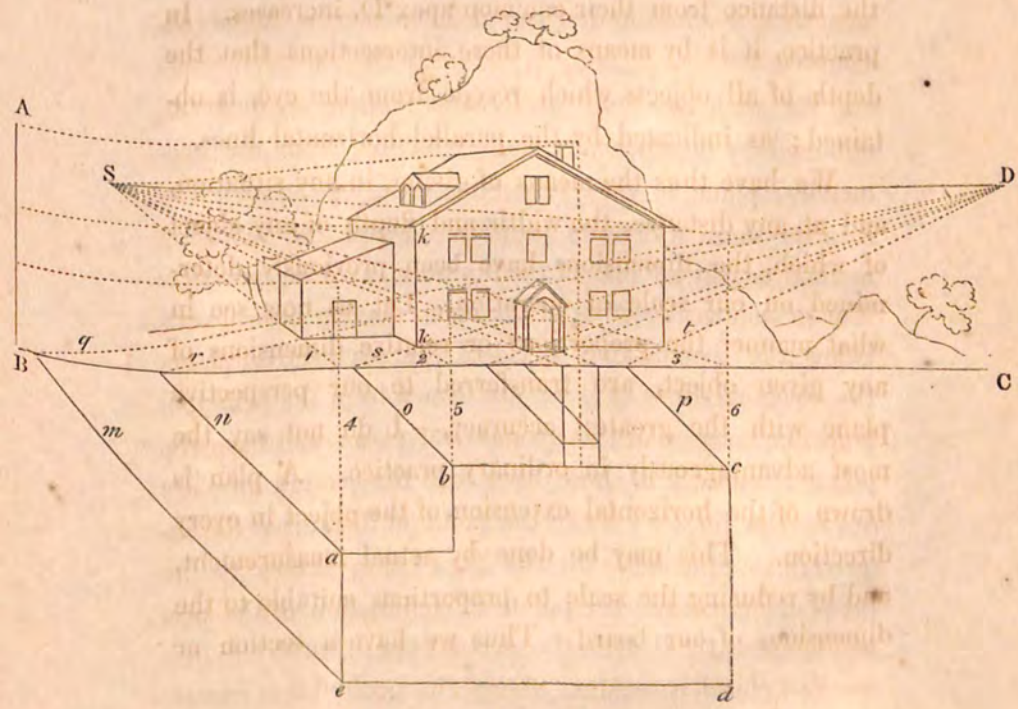


called the point of sight. All such lines, being parallel to the visual ray, are perpendicular to the canvas. The perspective diminution of objects which recede directly from the observer, is rendered by the decreasing intervals between these lines at successive distances: whereas, that diminution which is the result of the increasing obliquity of any surface, as it recedes, is given by lines intersecting or crossing the others diagonally; and which, from the same base line, meet at a common point D, at the same altitude as the point of sight. The intervals formed by the intersections of these with the former lines, may be seen to decrease in a uniform ratio, with their obliquity; since equal intervals on the base line A B, subtend angles progressively diminishing as the distance from their common apex D, increases. In practice, it is by means of these intersections that the depth of all objects which recede from the eye, is obtained; as indicated by the parallel horizontal lines.

We have thus the means of giving, in any situation, and at any distance, the width and depth of any object of which the dimensions have been previously determined on our scale of operation. Let us now see in what manner the proportions or relative dimensions of any given object, are transferred to our perspective plane with the greatest accuracy,—I do not say the most advantageously in ordinary practice. A plan is drawn of the horizontal extension of the object in every direction. This may be done by actual measurement, and by reducing the scale to proportions suitable to the dimensions of our board. Thus we have a section or

geometrical plan of the object, which, for conveniency, we shall call a house (See Fig. 2, *a b c d e*). It will not be supposed that the plane here in question, because it is called a geometrical one, becomes disburdened of the perspective influence which governs all other planes; but merely that the figures or sections drawn upon it are subjected to no other perspective control than that which belongs to the plane itself, and that the eye of the observer may be shifted about to any position which affords most convenience for ascertaining their proportions, as an architect or surveyor changes his position, when he proceeds to ascertain by measurement the situation and plan of a real building. On the perspective plane, the figure

Fig. 2.



representing the object is subjected to deviations from its primitive geometrical form, as well as to a reduction of scale; by which means, an apparent direction is given to its surfaces, which does not belong to the surface on which it is delineated. This plane or surface has, in fact, only two kinds of extension, namely, in length and in width; but the object delineated on it in perspective, acquires apparently, by means of the artifice alluded to, three kinds of extension, width, height, and depth: differing so far from the geometrical plan, in which there is no compensation, no departure from the reality, but reduction only; no kind of extension being communicable to the object than such as is common to it and to the plane on which it is delineated; and, as the bird's-eye view is chosen, horizontal extension is alone accounted for.

We wish now to transfer the section or diagram, obtained by measurement and reduction, from the geometrical plane to the perspective one; and to assign to it in the same, a definite position. I give the following method merely as one of the formulæ used in practice. The geometrical section of the object having been drawn below the ground-line B C, of the perspective plane, the diagonal lines *m n o p* are drawn from the principal points or corners of the geometrical plan: and from the points of contact of these lines with the ground-line, are drawn the lines *q r s t* to the point of distance; the intersections of which with the lines 1 2 3, drawn to the point of sight, from the points of conjunction of the perpendiculars 4 5 6 with the ground-line, give to the perspective object a position above the ground-line exactly

corresponding with that of the geometrical figure below it, as they likewise determine its relative width on the perpendicular plane.

The perspective section having been thus determined, the scale of elevation is fixed upon. This may be done either on a conventional vertical line A B, by the side of the picture, the elevation of each part being thence transferred to a point situated perpendicularly above the corresponding parts in the section; or, on the nearest perpendicular line of the perspective object itself. In either case, lines drawn to the point of sight produce a reduction proportionate to the removal of the part of which they mark the elevation. This method, which aims at precision, suits the purposes of the architect, and enables him to furnish, true to a line, the drawing of the edifice which he purposes to erect.

We may easily be convinced that the proportions thus obtained in the perspective projection, correspond perfectly with those of the building or object which it has been our intention to reproduce, since we have had recourse to calculation for the reduction of the same, and to an influence which is invariably uniform, in its conversion into a perspective drawing. Nevertheless, this impression of accuracy does not add much to our information respecting the relations of any object delineated on a flat surface to the real one; and the inquiry concerning the conditions of proportion and distance which apply respectively to real objects and to their imitation, would seldom lead, on this principle, to any thing like a satisfactory and conclusive solution. Let us consider some of the points which tend to remove

this kind of uncertainty. As our impressions of the appearances of objects are founded not only on their real, but on their apparent size, and as the picture or canvas cannot be brought nearer, or moved further off, without causing the corresponding change in the proportions of the images drawn upon it, it becomes necessary to fix the actual position of the picture, before we can give the apparent position and dimensions of the objects there represented.

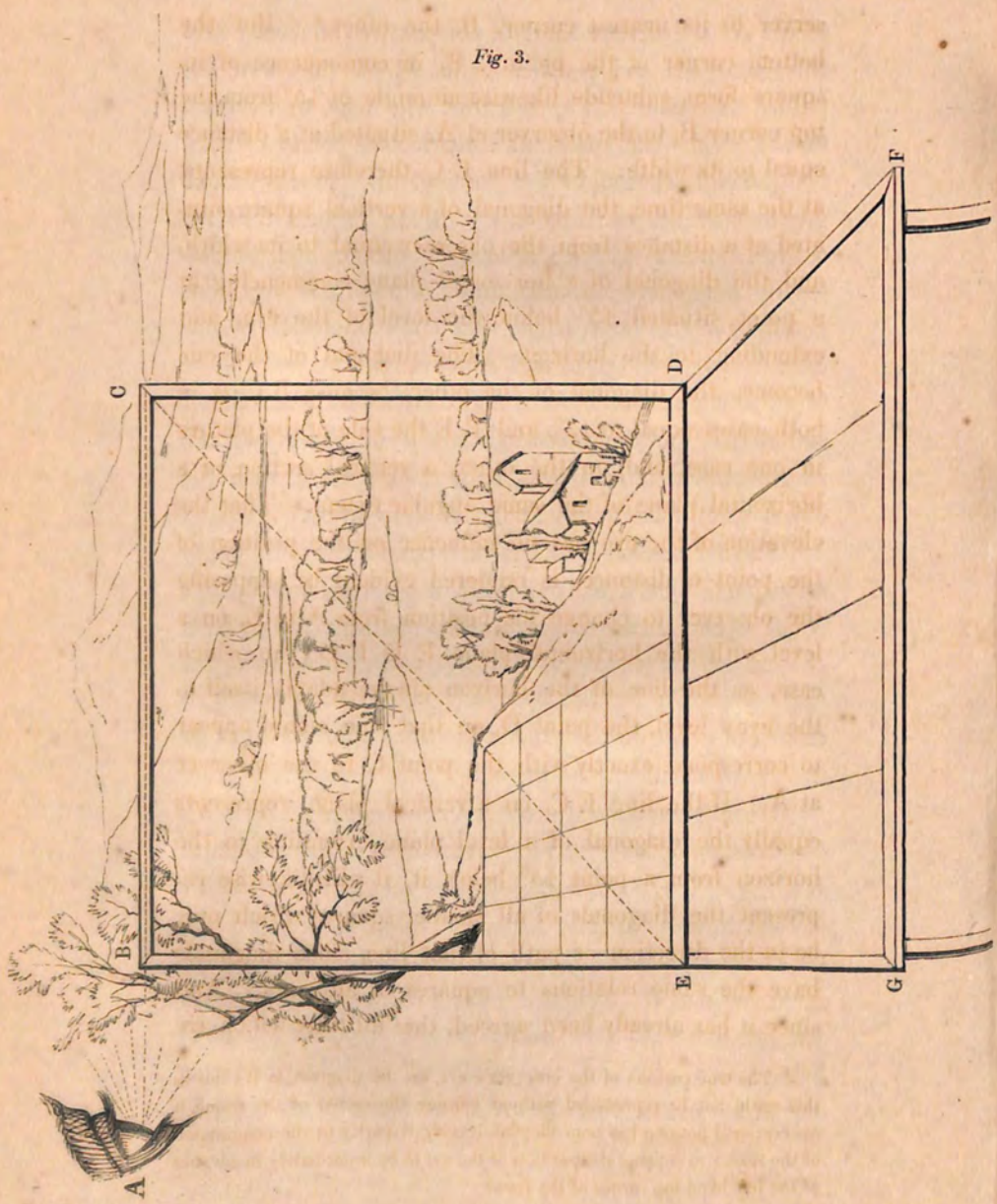
It has already been shewn, that lines on a near surface and small scale, may be made to correspond exactly with the lines of distant surfaces on a large scale: but it still remains to be ascertained at what point the objects represented on the small scale of the canvas, will appear to the observer to correspond with the objects on the large scale of nature; and to be proved, that from a given position, the perspective of objects having the reduced proportions and near position of the canvas, becomes identical with that of objects with large proportions but far removed. In general, the truth of a given point of observation rests on no further evidence than the accuracy and perfection of the object represented or delineated, as seen from it; and the excellence of the result seldom fails to obtain, on the part of the beholder, implicit faith as to the infallibility of the means employed. If mathematical proof be asked for, it becomes extremely difficult to supply it in a satisfactory manner; owing, chiefly, to the circumstance that, in explanations with diagrams, perspective influence and illusion cannot easily be pointed out by figures which, to form an intelligible picture, must be themselves sub-

jected to a different kind of perspective influence; and this entangles and perplexes that which they were intended to explain. The lecturer, who may, to a certain extent, deal with space, and mark out points of coincidence and relation in the ambient air, possesses much greater advantages: and it is with the request that the reader who may wish to accompany me through the following demonstration, will divest himself, as much as possible, of the impressions which are immediately connected with the figure, and endeavour to embrace those ideas which relate to form and distance in space, that I submit to him the following means of identifying the representation of an object, on a plane surface, with the object itself, from a given point of observation.

The distance which I here fix upon for the point of observation, is that usually adopted in practice, namely, one equal in amount to the width of the picture: the position chosen, opposite one of the top corners, is, however, quite unusual; but has been assigned to the observer in this case, owing to the greater facilities afforded by it in the explanation.

We will suppose the observer to be placed with his eye exactly opposite the top corner, B, of a square picture B C D E, Fig. 3, and at a distance equal to its width; in which case, a line, *l*, drawn from his eye to the further corner of the picture, C, would meet the horizon at an angle of 45° from the nearest corner of the picture, B; since such a line would be the hypothenuse of a half-square, of which the width of the picture forms one side, and a line drawn from the eye of the ob-

Fig. 3.



server to its nearest corner, B, the other.* But the bottom corner of the picture, E, in consequence of its square form, subtends likewise an angle of 45° from the top corner B, to the observer at A, situated at a distance equal to its width. The line E C therefore represents, at the same time, the diagonal of a vertical square situated at a distance from the observer equal to its width, and the diagonal of a horizontal plane commencing at a point situated 45° below the level of the eye, and extending to the horizon. The diagonal of the one becomes the diagonal of the other, because B C is in both cases equal to 45°, and B E the side of the picture in one case, and, in the other, a vertical section of a horizontal plane of the same angular extent. That the elevation of the eye has no influence on the position of the point of distance, is rendered evident by supposing the observer to change his position from A to E, on a level with the horizontal plane E D F G; in which case, as the line of the horizon always adapts itself to the eye's level, the point D, on that line, would appear to correspond exactly with the point C to the observer at A. If the line E C, on a vertical plane, represents equally the diagonal of a level plane extending to the horizon from a point 45° below it, it will likewise represent the diagonals of all smaller squares which may be in the direction or path of that line, since diagonals have the same relations to squares of all sizes. And since it has already been agreed, that all lines which are

* The true position of the observer's eye, on the diagram, is B; but as this could not be represented without effacing the corner of the frame, a conventional position has been adopted, leaving it partly to the imagination of the reader to suppose the position of the eye to be immediately in advance of the left-hand top corner of the frame.

really parallel, converge, in appearance, to the same point, if the square B C D E be converted into a perspective plane, or one designed to represent appearances, all lines which, on that plane, converge at C, would serve to mark the perspective diagonals of any squares having the same direction as those of which E C forms the diagonal. Observe the intersections of the check pavement.

The point which corresponds to C, is called the point of *distance*, because its position regulates the perspective width of receding objects with regard to their distance from the observer. The angular relation of the point of distance with the point of sight being always equal to 45°, its position, with regard to the side or border of the picture, must depend, not less on the distance of the observer than on the width of the picture. Thus, whereas the relations of the point of distance to the border, as well as to the ground-line, of the picture, vary continually with the position of the observer, its relation to the point of sight remains invariably the same. If the observer be situated opposite the centre of the picture, the true position of the point of distance is something less than half the width of the picture beyond its boundary; the diameter of the picture, seen from a point opposite its centre, at a distance equal to its width, being very nearly equal to 55°. This is, however, not more than the eye can very easily embrace without any motion of the head, and therefore furnishes those relations of the observer to the picture, which are most usually adopted in art. With regard to the height of the horizon, it is the apparent extent of surface comprised between it and the bottom or ground-line of the picture, which de-

termines (supposing the scene to be a level one) the distance from the eye, of the nearest part of the subject represented; as the lines drawn from thence, to the point of distance, regulate the perspective of the nearest object, conformably to its apparent distance from the observer. It is, however, only on the supposition that the level of the eye corresponds with the top of a square picture, that the diagonal of the vertical square becomes the perspective one of horizontal squares. The removal of the picture to successive intervals of distance equal to its height, would cause an apparent shortening of it, successively, of one-half, one-third, one-fourth, one-fifth, one-sixth, &c.; and a corresponding diminution of the angle of distance, if it may be so termed, of one-hālf, one-third, &c. Or, reckoning by degrees, the angle formed with the line of the horizon by the first diagonal in a square picture removed from a distance equal to its diameter to twice that distance, is reduced from 45° to $22\frac{1}{2}°$; and by the further removal of the picture at equal intervals, or of the objects contained in it, the angles formed by the diagonals at the point of distance, would be reduced successively, to $15\frac{1}{6}°$, $11\frac{3}{8}°$, $9\frac{1}{10}°$, and so on. Thus, any given removal of the front or ground-line of the subject, as well as of any of the objects of which it is composed, is exactly accounted for in perspective, by the angle which lines drawn from the perpendicular of the point of sight, to the point of distance, form with the line of the horizon. But, as the height of the horizon does not usually exceed one-third of that of the picture, the angle formed at the point of distance, by the lines marking the diagonals of square objects, with the line of the horizon, is generally

much less, at a given distance from the observer's eye, than what has been here allowed.

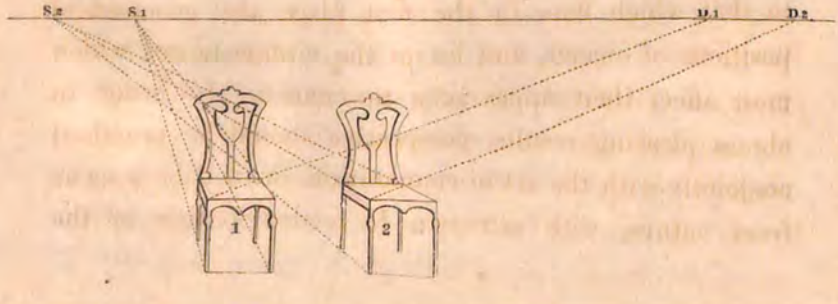
It is, however, usual in practice, to draw the lines marking the diagonals of squares across the whole width of the picture, from one of its bottom corners to a point of distance equal to half its width without its opposite boundary. This plan has the advantage of affording more decided, as well as more numerous intersections; although, at the distance at which the picture is usually seen, it gives too great an extension to the perspective horizon. But slight deviations from the exact relations of objects on the canvas to those in nature, are frequently sanctioned in practice, by convenience, although incorrect. Departures of this kind from the exact truth have but a relative importance. The characteristic resemblance of a scene or spot does not lose much from its being presented to the eye as though it were viewed a little closer, or a little further off, provided the relative distances and positions of the objects are maintained. Indeed, the ever-varying position of the eye evidently renders it impossible to be always consistent with nature with regard to that point which determines the depths or distances of objects, as it does likewise with regard to the other points toward which parallel lines converge. Provided all the lines and surfaces having the same direction converge at these points, it is almost immaterial whether their position be a little further to the right or to the left. At the same time it must be allowed, that when the spectator hits upon the true point for observing the correct representation of an architectural subject, the perspective effect is so greatly superior to that afforded from any other point, that the object portrayed appears

to increase in size, and may almost be fancied to have the proportions of the reality. But if the discovery of the point alluded to be attended with improvement as to the drawing, and with increased satisfaction on the part of the beholder, his eye is not distressed for the want of it, and receives offence only from such errors as result from the nonconvergence of all lines which evidently belong to corresponding planes or surfaces,—in fact, from the disobedience of the parts of any building or regular object to that subjection which should govern alike the whole.

The degree of accuracy which it is possible to arrive at in perspective, greatly exceeds the amount which is required by the usual uncertain relations of the picture to the observer; and it especially leaves far behind, the degree of knowledge in the application of these principles, which is generally possessed by those who have acquired some skill in the practice of them. How frequently we meet with persons who have gone through a treatise of perspective, or copied several diagrams, and would yet feel some embarrassment in putting into perspective an object so simple as a chair: and I believe this to arise, in a great measure, from the impression entertained by them, that the mathematical precision which appears to be in the very nature of every perspective figure or problem, must be strictly adhered to in the application of these problems. They can hardly fancy that, whereas the difference of a hair's breadth in the parallel sides of an object will suffice to make it appear distorted, a difference of an inch to the right or to the left, in the position of the point of sight, of the point of distance, or of both at the same time, will, in

many cases, cause nothing unnatural in its appearance, (see Fig. 4): and because they find themselves at a loss how to turn to account all the accuracy which they know to be inherent in the principles themselves, they imagine that they have some misconceptions as to the application of them. Such persons need only consider that the uncertainty which will always exist with regard to the situation from which their productions will be seen, renders it useless for them to bind themselves to the letter of any rule in fixing the position of the vanishing points, or, in other words, in determining the degree of inclination of the lines which mark the sides of the object; the variation of which has no other effect than to assign, as it were, to the observer, a position more or less near, to make him look more or less down upon the object, (if below the level of the eye), and to render the view of its level surface fuller or scantier. Such considerations as these should be determined by the effect on the eye, and by the perspective relations of other objects, if several be introduced, rather than by a scrupulous nicety in the perspective arrangements which refer to any individual one. It is not in putting in a first object, that you are limited as to the position of the point of distance, but in putting in a second, the perspective of which must of

Fig. 4.



necessity be conformable and consistent with the perspective of the first. This may be seen by the diagram of the two chairs, represented with square seats in order that they might present regular figures. Each chair, having points of sight and distance different from those of its neighbour, appears right singly, but wrong as seen in connection with the other.

It is with regard to the distribution of objects in a composition, that all the disadvantages which are connected with the method of drawing their geometrical plan beneath the picture before raising their perspective elevation on its surface, are rendered apparent. It soon becomes manifest that it is productive of the most confined ideas. Certainly, by this plan, the horizontal dimensions are, as I have before remarked, determined with the greatest exactitude; and the scale of elevation on the side of the picture serves to mark, with equal accuracy, their height: but, together with this map-like precision, the subject, when put in perspective, would have an insufferable degree of stiffness and formality, and would at once prove to the eye the sources whence it was derived, namely, the rule and compass. Art demands something that is elegant and graceful, as well as in appearance correct; and in order to obtain this, it is evident that a course should be pursued, very different to that which fixes in the first place the geometrical positions of objects, and leaves the circumstances which most affect their appearance to chance. In order to obtain pleasing results, perspective should be practised conjointly with the art of composition, or, if it be a scene from nature, with attention to a distribution of the

objects which is decidedly graceful. Those lines and forms which have the chief influence in this, as well as in the perspective effect, are carefully observed; and the points of convergence on the horizon are fixed upon as correctly as the eye may be able to accomplish by an attentive comparison with the appearances of nature. The perspective of the details is then accurately made out by processes applied immediately to the object itself, by means of the intersections of the lines which meet at the point of distance, or at accidental vanishing points, with those which converge at the point of sight; or by finding out the centres of arches, by means of diagonals drawn from the corresponding points of perspective lines; as well as by the other practical methods, of which it would be foreign to the object of these remarks to give here the analysis.

In the landscape scene, the more is accomplished by the eye and judgment, and the less is left to rule, in the leading perspective forms, the more elegance or picturesqueness is likely to result from their arrangement. In rustic and irregular objects, perspective becomes, to a certain extent, subservient to the dictates of caprice. When, however, forms assume a regular and symmetrical character, as in pieces of architecture, especially when they belong to interiors of retiring aisles and galleries, with gothic arches, groining, &c., where the beauty of the subject depends chiefly on the perfect resemblance and conformity of the decorations, it becomes necessary that every part should be drawn with exact reference to the rules of perspective, and be made subservient to one extensive and combined scheme of perspective effect.

I will now mention some points which, if neglected, are especially calculated to offend the eye, and to reveal the ignorance of the performer, in scenes which afford little art and symmetry, and leave the mind at liberty to plan its own arrangements. All lines of houses, for instance, which, if continued, would meet at a point not on the horizon's level, but above or below it, appear decidedly wrong; as buildings are never seen, even when constructed on slopes, whose floors and windows are not level. Any apparent want of uniformity in the front, pediment, or wings of a building, where everything seems to point out that these parts are intended to correspond, likewise gives the impression of false drawing: and in taking a view of a quadrangular edifice with four towers, (one at each corner), similar in form, but somewhat unequal in size and height, it would be almost necessary, in the perspective drawing of the building, to suppose these towers equal, or the awkwardness of the effect would appear to be the result of false perspective, and not of correct imitation. A scrupulous adherence to nature, in the representation of a building irregular in some of its parts, though in its general aspect symmetrical, would, it is most likely, be misunderstood. An old arch of a bridge, of which the two sides did not correspond, though it might hold together, and in nature appear the more picturesque, would scarcely be tolerated in a picture; so seldom do we associate impressions of stability with an arch which is not regular, and so often notions of false drawing with arches of which one half does not in appearance correspond with the other half.

Inclined Planes. — Considerable difficulty is frequently experienced in making a road, plane, or terrace, appear to go down hill, or descend from the observer. I believe the difficulty to arise generally from the circumstance that collateral particulars are too much neglected. The attention is not sufficiently extended to the perspective effect of the entire scene. The difference between the actual convergence of a level road, and of a descending road, is, in general, so trifling, that it does not convey the impression of a difference of direction, if observed without reference to the height of the horizon, or to the relations of other objects. If a board, or any other opaque body, be so held that the horizon and distance, as well as all other objects of reference, are concealed, the inclination of a descending road left visible beneath, is rendered at once problematical, even in nature; and in many cases it would be difficult to discover whether it descend or not. As the lines of the road itself afford, therefore, so little evidence of its direction relative to the horizontal plane, the indications of its descent must be sought for in the characteristic appearance of other objects in connection with it. If there be houses, the relation of the horizontal lines of these houses, and of their vanishing point, to the direction of the point of convergence of the lines of the road, marks the descent of the latter much more impressively than would irregular objects; because we are in the habit of connecting at once the idea of level surfaces and of level lines, with the appearance of every house which we see. If there be no buildings, the appearance of the trees, and of all other upright objects, greatly assists in appreciating the

amount of a descent. Those which are situated on the top of the eminence on which you stand, rise nearly their full height above the distance; those which are lower down the descent, have about one half of their length below the horizon or boundary of the scene, and the upper half above, cut out on the sky; lower still, a less portion of the tree is lifted above the land-boundary; till, at the bottom of the hill, the whole tree has sunk below this mark. In addition to this, the tops of the trees are rendered more visible as their position is lower, and the trunks or stems become proportionably more concealed under the spreading heads. This marked and progressive difference in the appearance of the trees, as they occupy a lower position on the hill, is connected, in the mind's eye, with the less apparent changes in the road itself, and enables the observer, in a great measure, to assign to it its true amount of inclination.

When the descent is sufficiently great to afford a bird's-eye view, the apparent expanse of every stream and sheet of water, the full view which is obtained of the roofs of buildings, the great extent of country which is seen beyond the slope, and the comparatively parallel sides of the level portion of the road which traverses it in the distance, mark the amount and continuity of the descent. The appearance of a road ascending an opposite hill, may likewise contribute to the descending effect of the portion which is nearest to the observer. It is by means of these circumstances that he becomes aware of the direction of the descending plane, when the term of comparison which is afforded by a view of the natural horizon is wanting. Much of the quickness and

certainty with which we are able to appreciate effects of this kind, is doubtless owing to our instinctive knowledge of the eye's level, or of the position of the natural horizon, even when concealed from view. Instances would otherwise abound in nature, in which the degree of ascent, or descent, of roads and slopes, could not be easily ascertained. Hereby is shewn the importance of a position of the observer's eye on a level with the horizon, in all pictures in which the appearance of a descent is introduced.

The lines of a road which becomes steeper at a certain distance from the observer, converge much more rapidly than do those of a road which begins to have an equal degree of steepness from the point where the observer is situated; which is owing to the circumstance that when he is stationed on the level part of a road, as is the small figure B, diagram *5*, the plane of the other part of it, which descends rapidly, is nearly on a level with his eye, and appears, consequently, extremely foreshortened, as is shewn by the very small angle which the inclined portion of the road from C to D presents to the eye of the observer at B. This rapid convergence, as I have already stated, does not occur when the observer is himself on the plane of the inclined road, as at the point C.*

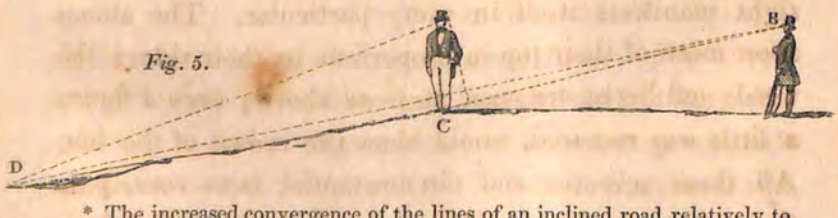


Fig. 5.

* The increased convergence of the lines of an inclined road relatively to the lines of a flat road, is proportionate to the greater proximity of the eye of the observer to the latter, in a direction perpendicular to its plane.

One of the characteristics of a descent is, that the same angular inclination below the horizon includes greater distances than it does on a level surface. The more rapid the descent, the further are removed the objects on which the eye would alight with the same inclination of the visual ray: so it happens that, when there is a sudden break or precipice, the eye passes all at once from objects comparatively near, to very distant ones; and, when there is but a slight gradient, the point attained by the eye, below the horizon, is still considerably greater than it would be on a flat surface. Owing to this circumstance, a picture in which a descent has been represented, without raising the horizon, would commence much further off, that is to say, its ground-line would mark a point much more removed, than would be the case were the picture to represent a level scene: but as it is usual in such cases, to raise the horizon considerably, in order that a portion of foreground may be included as well as distant objects, the bottom or ground-line of the picture becomes much more depressed, relatively to the observer, when the landscape is represented as seen from a lofty and commanding situation, than when supposed to be seen on a level. In nature, the effect of this depression of the sight manifests itself in every particular. The stones show more of their top in proportion to their sides; the weeds and herbs are seen as from above; even a figure a little way removed, would show the crown of the hat. All these minutiæ and circumstantial facts contribute their quota to the truth and fac-simile likeness of the whole.

The want of a sufficient clue to the effect before us, often renders the appearance of nature deceptive; and in bleak open places which afford no standard of comparison, either the rapidity of a descent, or the steepness of an opposite acclivity, not unfrequently appears greatly increased or diminished, until the nature of the spot can be surveyed from points which do not subject the observer to delusive influences. The apparent impracticability of the road which is before the traveller, is an occurrence by no means rare to him in a country possessing new features. Deceptions of this kind, which I have witnessed in every possible form, never struck me more than at a spot half way between Grasse and Castellane, in the département des Basses Alpes, in which a serpentine road, ascending a barren and treeless slope, appeared, in some places, perfectly vertical. Several circumstances combined to produce this illusion; but it appeared to take place chiefly because the effect of perspective inclination was added to that of the actual slope of the road, without being apparent, owing to the peculiar nature of the slope. The ascent of the road proved, afterwards, to be most gradual and uniform.

THE KNOWLEDGE OF PERSPECTIVE WHICH IS REQUISITE IN THE PICTURE GALLERY.

Perspective will be here considered chiefly as applied to the examination of works of art, with a view to their more complete enjoyment. Truth of imitation, especially with regard to form, would be more universally and more closely adhered to, if amateurs in

general were more experienced in applying whatever principles of perspective they may possess, to the inspection of pictures. The developement of the talents and resources possessed by the artist, proceeds step by step with the tasteful discernment of the amateur. The more enlightened is the latter in matters of art, the more extensive and efficient are the means of gratification which the painter commands; and the following remarks have chiefly for their object to promote acquaintance on either side.

Point of Observation.—Mr. Charles Hayter, in his work on Perspective, alludes to the necessity that the observer should be aware of the painter's distance; observing, "This is a duty you owe the artist, before you are qualified to criticise the perspective of his picture."* Whenever an observer places himself before a work of art on a flat surface, the perspective arrangement of the subject, and his own experience, should enable him to fix upon, or (if circumstances should prevent), at least to determine in his mind, the point at which it will appear most true, consequently most pleasing. In presence of a large painting, he retires to a distance of from five to eight or ten yards; in which case, the figures, which are of the size of life, are seen by him exactly as he would view a group of living figures. In the small landscape, in which the proportion usually adopted for the figures is about or under three inches for a picture a yard in width, they appear to an observer, stationed at a dis-

* Hayter's Introduction to Perspective, Practical Geometry, &c. p. 56.

tance equal to the width of the picture, to correspond to the size of real figures situated about twenty yards off; a distance three or four times as great as that from which he is supposed to view the figures in the historical painting. This shows at once the relative scales of the historical and of the landscape painting. That of the historical piece, though seen further off on account of its larger dimensions, generally exhibits the subject as it would appear in a somewhat close view of the same objects in nature; whereas the landscape, though generally seen from a comparatively near point, represents a scene which is contemplated at a considerable distance. In either case, it is necessary that the perspective plan should be adapted to the intended point of sight: consequently the foreshortening of objects becomes more marked and sudden in the subject which is composed of large figures, than in the landscape. If architecture be introduced in the historical piece, the lines fall rapidly towards the horizon: and the distant objects, though on a large scale, are smaller, as compared to the figures, than in the landscape; so that the head, or a limb, will cover over, and appear to hide, a larger portion of them. In the landscape, on the contrary, the figures, which are supposed to be seen at a considerable distance, intercept but a small part of the objects beyond them: buildings and mountains rise behind, unbroken in their general form by the figures and the secondary objects of the foreground. Thus is maintained the due ascendancy of the landscape portion of the scene, conformably to the aim of this kind of composition.

Now what will be the result when the observer

neglects the true point of sight,—I mean the position called for by the size and arrangement of the piece? Let him remember that objects receding at equal intervals, undergo a diminution which is proportionate to the nearness of the objects subjected to this diminution; and that if there be three or four houses, of which the second is at a distance beyond the first, equal to the supposed distance of the first from the observer, the second will be but half its height, the third two-thirds of the height of the second, and so on. Now, if the observer recede to a distance at which the first house will be twice as far from him as the second house from the first, the decrease from the one to the other will be too great and sudden, and no longer consistent with the distance at which he is supposed to view them. By receding twice the length of the picture, the diminution from the first house to the second would be equal to one-third instead of one-half, and the relations of all the other houses would be likewise influenced in a less degree. In this manner, a perspective plan which is adapted for a close view, becomes unfitted for a distant one. But as it is in the nature of perspective drawings to adapt themselves to circumstances, and to assume, in every case, the appearance which seems most probable, the detached houses would appear to draw closer together, or to grow further apart, as the observer approached nearer to, or receded further from, the picture; and would invariably maintain such perspective relations as would be best suited to his position. Thus, the effect would not be false in itself, but only as the repre-

sentation of a spot or locality in which the houses were situated at determinate intervals.

If, instead of objects whose form and position, like those of houses, are variable, we suppose something which is more uniform in shape, such as an arcade or colonnade, it will be evident that the proportions of the arches would be changed, and their elegance increased or impaired, should the adoption of a nearer or of a more distant point of sight on the part of the observer, cause the arches in appearance to contract or to widen. Arches which, in nature, are seen in the distance, are crowded in greater numbers in the same ocular space, than arches which are nearer on the same plane: and if the observer, by retiring a step or two backward, place himself in a position at which the foremost arches in a picture become distant ones, they will be subjected to those circumstances which in nature would render them in appearance narrower, or more contracted in proportion to their height; whereas on the inflexible canvas, their form remains unchanged. They therefore become, in appearance, wider and less graceful.

It might be useful if the observer were to compare the outlines of objects, having determinate forms, which are situated in the foreground, with the same objects situated in the middle distance. He would thus be able better to appreciate the exact effect of his own removal from a near to a distant point of sight. A man walking, in the foreground of a picture, appears to stride if drawn in exactly the same position in the background; and the same effect takes place, to a certain extent, if

the observer throw back, as it were, the walking figure, by receding to a greater distance from the picture. The heads of animals bear a very different proportion to their bodies with a close and with a distant view: though rightly proportioned as seen from the true point, they become too large for the body by removal to a distance. A circle drawn in perspective at a given distance from the horizon, appears oval when the surface on which it is traced is held too near the eye: this increases its angular distance from the horizon; and a circle drawn in this position is always made more round and less elliptical than one situated near the horizon. I have seen an engraving of the Colosseum, in which the artist's point was too close to the building. The circular lines fell too abruptly; and from that position which was in other respects preferable for viewing the plate, this building lost the character of vastness for which it is remarkable. Some figures unloading a cart of hay, in a picture by a modern artist, exhibited a few years since, formed a very natural group from a near point; but with a distant view, where the same perspective diminution expresses wider spaces, the intervals between the figures on the cart and those on the rick, appeared too great, and they lost the connection necessary for their employment.

Foreshortening.—Mr. Hayter discourages attempts at foreshortening in the human figure, especially when single.* It appears to me that he might have added, that the ill effects which result from attempts at foreshortening

* Introduction to Perspective, &c. p. 63.

in historical pictures, depend chiefly on an exaggerated application of the principle. I have observed in some paintings of the old masters, I believe chiefly of the Bolognese school, a very marked difference between the size of the figures on the immediate front or in the bottom corner of the picture, and of those having a somewhat more retired or central position. Now in order that groups of figures thus proportioned to each other should appear true to the eye, it would be necessary to take a very close view indeed of the figure or of the figures which are so much exaggerated in size. From so near a point as this, the effect of the picture could not be judged of, nor the treatment of the subject appreciated: and in fact, this class of pictures, in which the artist appears to have made it his first object to display his knowledge of perspective, and skill in foreshortening, seldom exhibits those more desirable merits which abound in contemporary works of other artists, and perhaps in paintings of the same master. The relative proportions of the figures in a historical subject, do not appear satisfactory unless adapted for a point of sight whence the whole composition may be seen at once: and in this case, an attempt at foreshortening in the figures, and in the positions of the limbs, does not appear to be open to the objections to which Mr. Hayter alludes; and the merit of the performance, when successful, is due much more to correct drawing and anatomy, than to the knowledge of perspective. Many striking and at the same time very natural examples of this kind of foreshortening, are to be found in the paintings of the old Italian masters. One of the best that I have met with is the foreshortening of

OF THE
BOMBAY
BRANCH
OF THE
ASIATIC SOCIETY

SAN PIETRO E SAN PAOLO.

By Guido Reni.

the hand of St. Peter, in the admirable picture of St. Peter and St. Paul, by Guido Reni, in the Pinacoteca of Milan. In the original painting, the adaptation of the proportions of the hand to those of life, by admitting of a convenient and at the same time natural distance for observation, has doubtless assisted the artist not a little in attaining a most brilliant mastery over the difficulties of foreshortening.

Further particulars connected with the Observer's Station.—I will here offer another remark or two, relative to the adaptation of the perspective of objects to the point of observation. If you were to take a picture two feet in width, and to draw a building six inches in height, with its corner toward the observer, you would necessarily make the lines which mark the top of the building, very much inclined to the right and left, that is to say, toward their respective points of distance. But again, take a picture three yards in width, and put in a building, likewise six inches high, and not more, with its angle turned towards you. Would you, in this case, make the lines of the top equally inclined as before to the right and left, or less so? Would not a much less degree of inclination appear sufficient in the large picture, than in the small one? And would not the reason of this be, that as the large picture is seen further off, the angles of inclination of the two sides of the building are made to correspond with those of the same object when seen at a much greater distance in nature? Whereas, in the small picture, two feet wide,

placed proportionately near the eye, the six-inch building can represent nothing else than a very near object, and its lines must have that excessive convergence peculiar to objects which you look very much up to, that is to say, which subtend a large angle of vision. But if the building with the slightly converging lines is right in the picture three yards wide, because it is expected that the observer will place himself at a proportionate distance, how could the marked declination which is given to the top of the building in the two-foot picture, appear equally right at the distance which is suited to the large one? Is it not evident from this example, that there is a distinct focus for each? Yet it is but an unexaggerated instance of the necessity of considering, with regard to pictures of various sizes, what results the point of observation you are about to fix upon may have in the appearance of the picture.

Another consideration has reference to the uniform influence of removal with regard to the objects in a picture, as compared with the different degrees of influence which a corresponding removal of the observer's point of view produces on the objects in nature. In the natural scene, the foremost objects being the most subjected to change, they sink beneath the remoter objects as the observer takes a more distant view;—the mountains rise, as he recedes, above the intervening trees and houses: whereas in the picture, where the influence of removal is equal on all objects, the hills and mountains remain stationary like every thing else, and become, from a distant point of view, deficient in grandeur.

In addition to these defects, immediately connected with relations of form, the aërial perspective suffers in its correctness, when the observer takes up a position different to that which the picture was intended to be seen from. Too close a view of distant objects in a painting, renders their tone inconsistent with their dimensions; they become too faint and vapoury for their increased proximity. On the other hand, remote objects painted with the degree of vigour necessary for a near view, appear heavy with a distant one. The progression in the indistinctness of objects is relative to the supposed distance of the nearest from the observer. If he take up a position at which this indistinctness ceases to have any connexion with the space which separates him from the scene, he is prevented from participating fully in the aërial gradation, and from entering into the sentiment of its delicate effect; and he ceases to be as it were a member in the scene.

The progression of the graduated hues which paint the vault of heaven, as they spread from the horizon upwards, is entirely relative to the apparent or angular division of space; it has no relation to the real dimensions of the objects on the earth's surface: and the rendering of this effect on the canvas, can be adapted but for one position,—that from which the progression of the tints equals their succession in nature in a determinate angular space. The colour of the sun passes from red to white, as it ascends, in the same geometrical ratio. The deepening of the colour of the water, from the horizon downwards, is also appreciable by the angle of vision only; and since you must look down upon the

water, in nature, in order to be made sensible of this deepening of its colour, that part of any picture in which it is rendered, ought likewise to be looked down upon. With the nearly level view which is obtained from a distant point, the colour of the water could not possibly be seen.

A change in the position of the observer, to the right or to the left, that is to say, in a direction parallel to the plane of the picture, produces results of a different kind. The vanishing surfaces of objects appear to move as he moves, but in the contrary direction. As he proceeds to the right, the retiring lines appear to converge to a point further to the left; whereas, if he move to the left, the receding surfaces appear to incline toward the right. The perspective effect thus becomes partially turned round with the lateral motion of the eye. But although the receding planes appear to adapt themselves to the position of the observer, the direction of the parallel ones does not always seem to correspond. They cease to appear at right angles with the vanishing surfaces. For instance, if a building, with a parallel front and receding side, occupies the right of the picture, the horizontal lines of the front would only be drawn parallel to the top and bottom when suited to the eye of an observer situated opposite the vanishing point of the side, conventionally termed the point of sight. A deviation of the observer from this point of convergence, toward the right, would, in order to be in accordance with nature, require that the parallel lines of the front of the building should have a certain inclination or convergence toward the side of the picture: whereas, if he proceed beyond

the point of sight to the left, it would be necessary (and this may appear paradoxical at first thought) that the top lines of the front of the building should incline upwards toward the side of the picture on the right, or the front of the building must cease to be at right angles with its vanishing side; for the side lines of a square building, of which the front is parallel to the picture, meet at a point exactly opposite the observer. Were they to unite at a point nearer to the building, they could not belong to a surface perpendicular to the plane of the picture, but would represent a surface retiring with a still more abrupt angle. When the observer, therefore, takes a position beyond the point of sight, the parallel lines of the front of an object no longer remain square with those which mark the side, unless they are made to diverge upwards and downwards towards the border of the picture. But in general, the lines representing the fronts of buildings are drawn horizontal; and since they continue to remain so whatever be the position of the observer with reference to the point of sight, an appearance of false perspective frequently ensues in large pictures, especially when the closeness of the parallel lines to the frame fixes undeviatingly their position, in the eye of the observer. Unless stern necessity should interfere, a right appreciation of the truths of perspective with regard to the arrangement of pictures, would at all times cause large architectural subjects to be so placed that the observer could take a front view of the principal receding vista, and, should he be at liberty to choose his own position, determine him to select at once this so necessary point of sight.

Sir David Brewster makes some cursory but very ingenious remarks on the effects of that mobility of retiring surfaces which so greatly tends to mitigate, in the picture, the evils arising from incessant change in the point of observation. The example which he introduces is that of a gun, which, from whatever point it is seen, appears ready to shoot the looker-on;—in fact, as Sir D. Brewster observes, in terms which convey approximately the same meaning as those which I have used, it is the gun which is exactly turned towards you, of which, in every case, you see neither side, but the muzzle only. And since, in the picture, a gun which is painted with the muzzle alone visible, never appears otherwise, whatever position the observer may take up; its appearance when thus represented must necessarily convey the impression of one which is directed towards you. The example is strengthened by two other guns, one on each side, of which the sides of the barrels are visible, and which appear to turn with the centre one as the observer changes his position.

The influence which these changes in the position of the spectator exercise in the relations of square buildings, and of other angular objects, to the surface of the picture, is extended more or less to circular objects. A tower which is situated in the centre of a picture, or opposite the eye, is represented with an equal fall or inclination of its summit on either side, because the whole visible portion of the tower, or the half of it which is nearest to the observer, corresponds exactly with the plane of the picture on which it is drawn; but the visible half of a tower which is situated near the

side or border of the picture, does not correspond with its plane. The vertical section of it made on this principle, would be inclined inwards relatively to the plane of the canvas: consequently the points of contact of the sides of the tower with the line of its summit, would be marked at unequal heights on its surface; and the line indicating the summit of the tower, or any circumference situated above the level of the eye, would fall lower and more rapidly toward the middle of the picture than it would toward the side. It may therefore be preferable in large pictures, where the observer would be likely to confine himself to a central view, to cause the summit of a tower situated near the side, to incline towards the centre; though in small pictures seldom seen from one point, an equal inclination of both sides of the tower should be preferred.

The expediency of confining the eye to a given point of observation, depends greatly on the size and proportions of the work. Rules to this effect are much less stringent in small paintings than in large ones. In the case of a small drawing which is held in the hand and turned about in any direction the observer fancies, the eye seems to be almost inclined to regard the objects as a group artificially put together, and moving with the plane to which they have been affixed; whereas, the larger the representation, and the less it is capable of being transferred from one situation to another, the more the mind is disposed to identify it with nature, and the more conspicuous are all such distortions and incorrectnesses of outline as result from the want of a point of observation at which every line delineated on the canvas

would exactly correspond with the apparent form of the objects, supposing them to be real. It is in decorative painting, where one of the chief objects aimed at is to deceive, and to make imitation pass for reality, that these incoherencies of perspective become most striking: and the representations of galleries and arcades, executed with the object of giving apparent extent to the internal architecture of a building, appear monstrous, until the eye has caught the true point for which the effect was intended.

Large historical pictures are seldom seen in perspective. The bottom is, in general, not much below the level of the eye; and the horizon is necessarily, in such cases, considerably above it. Horizontal surfaces are shown where, according to nature, they could not be perceived. In appearance, they slant toward the observer; and not unfrequently, the plates and dishes seem about to fall from the table on which they are placed: though, were the observer on a level with the point to which the horizontal lines converge, the perspective would appear correct, and the effect natural. Paul Veronese appears to have managed the splendid architecture of his large historical works with due regard to these difficulties of situation. He has at times kept the horizon so low, that the level surface scarcely appears, and the figures come out immediately on the sky, or on the buildings, beyond them. In another example, which seems to have been repeated by the same artist, the banquet and consequently the principal groups of figures are on a terrace above the level of the eye, so that its level surface is unseen; although the steps

which lead up to it, and other tasteful arrangements, give sufficient extent and developement to the architectural composition.

In the landscape painting, the necessity of a position which admits of a horizontal view is chiefly felt in flat scenes, such as sea-pieces, plains, and rivers. If looked up to, the level which constitutes the marking feature of the scene disappears, and it loses its character of truth. The effects of elevated position are less prejudicial in mountainous scenes, where the eye discovers no horizon, and no level of any extent. But planes inclined from the observer, such as descending roads, cannot be expected to deceive, unless they be hung at or below the true level. The difference between a horizontal and a slightly inclined plane being in a great measure dependent on the depressed angle of sight, the overcoming of this difficulty cannot be hoped for, if the observer has to look up to a descending plane in the imitation, which he would look down upon in nature. When the picture cannot be hung on a level, an inclination forward, proportionate to its elevation, is desirable. The eye then meets the plane of the picture at right angles, and level planes appear at least perpendicular to its surface.

Some persons may remember a view of Amalfi, by Stanfield, exhibited in the year 1848. The town extended at the foot, and up the steep slope, of a mountain on the right. The lines belonging to the parapet of a bridge, and to the roofs of the houses, were made to descend very rapidly toward the horizon. As this picture was hung below the level of the eye, the inclination

of the parapet of the bridge, and of the lines of the houses alluded to, did not appear to result from the perspective effect. It would rather have been attributed to a very precipitous, and, as the picture was situated, unaccountable ascent of the road and buildings: and it was by no means easy to place one's self in a position from which these lines would appear horizontal. The apparent defect in this fine picture, resulted, in this case, from its position: but as the most favourable site is seldom attainable with perfect freedom and convenience, is it not evident that there is some danger in giving to the horizontal lines of buildings so decided an inclination, that they only appear correct to the eye from a very limited and close point of observation; and that it may be desirable not wholly to deprive the spectator of that freedom in the choice of his own ground, of which some share at least is always expected by him?

When the painting is hung on a level, it is the observer himself who is chiefly responsible for finding out the true point for observation; but it devolves upon the artist to facilitate the detection of it, by giving to the objects proportions suitable to the dimensions of the picture, and by so disposing them as to draw the attention chiefly towards the centre of it, or the centralizing point of the vanishing lines. It is not the fault of the observer, if the number and diminutiveness of the objects oblige him to pass before each in succession, viewing them as he would detached portions of a panorama, instead of remaining stationary at a central point in the distance. A multitude of minute details in a large picture, require to be viewed so closely, that a

sight of the whole cannot be enjoyed at the same time; and they become isolated objects or groups of objects. With this close inspection, the beauty of arrangement and the power of effect, which should bind all the objects together, become lost to the eye, as they extend on the oblique surface to the right and left of the observer.

As a plea for minuteness, it has been urged that there is a certain pleasure in perusing closely an elaborate representation, which does not lessen that of enjoying afterwards, the effect of the picture at a proper distance. But objects cannot be painted truly both for a close and for a distant view. A composition is alone seen quite correctly, as a scene in nature would present itself on a transparent medium of such dimensions, and placed at such a distance from the observer, that his eye could embrace the whole from one point, with very little motion of the head. A picture placed at a distance from the eye equal to its width, meets these conditions, whatever be its dimensions; and although the various sizes given to objects in the best proportioned compositions, the many dissimilar shapes of the pictures where they are represented, and the varying distances at which they are seen without much apparent distortion of the objects, show that the relations of proportion between the real subject and the subject represented may vary considerably, a decided departure from every intermediate term of proportion, leads to the most unsatisfactory results: and the work must necessarily fail in exciting that interest which is realized by a comprehensive subject, unless the connection between every part be felt, and the harmony of the entire arrangement enjoyed, at once.

I have remarked, in the section on light and shade, that a broad line appears darker than a fine or narrow line of equal intensity. But at a distance, all lines become in appearance more attenuated; consequently, large drawings which are intended to be seen at a distance, must have their delicate lines heavier, and their strong lines broader in proportion, than such lines are made in a small drawing which is held in the hand.

But there is more than this with regard to the adaptation of lines or touches to the situation of the eye. Mr. Ruskin has described very forcibly, the change which takes place in the countenance of a friend as he advances towards you. The features are identified slowly and progressively.* Now I should like to see objects introduced into the picture with just that degree of distinctness which is necessary that they may be easily identified; but without having any thing of that conspicuous and uniform contour which is usually ascribed to very near objects. There is a kind of intelligence in the distribution of the touches, which renders the features and character of objects, most perfectly at a determinate distance, and seems to point out the observer's station. If he approach nearer than that point, he discovers the mechanism of the art. It may be nothing offensive,—perhaps a free and bold handling of the brush,—but still the objective is not distinctly individualized; and he is able to interpret less easily than at a yard or two further back, the meaning of every stroke. If, on the other hand, he recede beyond the

* See "Modern Painters," vol. i. 3d edition, p. 189.

intended point, the appearance of the picture becomes diffuse, and less significative. The fact is, that in this last position, the touches of light want the necessary power, and those of dark the necessary breadth, in order that the whole subject be pregnant with relief and effect; and the observer hastens to a spot where these shadowy and meaningless images become speaking forms. Such is, to a greater or less extent, the management and *condotto* of that painting, of which every particular, even down to the execution, is carried out with a view to its perfection. Pictures in which the objects are put in with a hard and distinct outline, however unsatisfactory with a close view, do not improve with a distant one. They remain hard as long as they can be seen, and then become insipid and feeble. The amateur learns nothing, by the survey of such a picture, of his engagements towards it; or, if he already possess the degree of tact which is necessary for the observation of works of art, he feels embarrassed in endeavouring to apply it. Generally speaking, difference of sight prevents the advantages which depend on the adaptation of the style of the painting, and of its degree of finish, to a determinate focus, from being fully realized: the diminutiveness of the objects and the elaborateness of the work may, however, always be made to bear some relation to the size of the picture, and to the proportions of the subject.

It is chiefly in the large picture that the influence of distance, or of a suitable removal, is made to concur in producing that predominance of effect over positive form, which, in nature, is the result of a still greater expanse of the scene. In small and closely-examined pictures,

little assistance can be thus borrowed from the interval which separates the observer from the canvas. The illusions of distance must be entirely counterfeited. The lines and touches are made either fainter or more diffuse; but the faintness of the line, or the diffuseness of the touch, is perceived, and forms no exact substitute for indefiniteness. The usual conditions of the small picture are therefore much less favourable to the rendering of the effects of distance, than are those of the large painting.

The defects which result from too small a scale, and too high a finish, of a portion of the painting, for the size and distribution of the whole, are very evident in the picture, representing a Boar Hunt, by Velasquez, in the National Gallery. The comparative smallness of the figures on the foreground, and the many details there brought together, require a very close position for their inspection; whereas the landscape, representing a small plain surrounded by a circle of hills, in the neighbourhood of the Escurial, extends so high up the picture that it seems intended for a bird's-eye view; and in its present position, hung on a level with the eye, the effect can only appear tolerable at a considerable distance, where the care bestowed on the figures would be lost. They require a focus of vision distinct from that which is adapted for the landscape. The perspective of the scene would be improved, if the picture were hung still lower; but in no position would the figures in the front, though nicely painted, appear otherwise than a belt across the foreground. Their arrangement and execution would alike prevent their mingling with the subject.

Some of the old Flemish painters, who were skilled

in rendering the common-place truths which are dependent on character, but neglected those which are the result of theory, occasionally fell into the error of adapting an excessively minute style of execution to pictures whose dimensions were not proportionately reduced. Amongst our modern artists, the paintings of Mr. Martin manifest, in some cases, a corresponding tendency. The multiplicity of the most elaborate details, and the fascination of his miniature-like figures, invite the closest inspection; whereas the vastness of the subject allows it to be comprehensively embraced only from a distance. Should less successful imitators carry out this style, the observer would be kept in suspense between a near and a distant view, without being rivetted to the former by the magical delicacy of the work, or satisfied, in the latter position, by the grandeur of the subject.

PROJECTED SHADOWS.

GENERAL REMARKS.

Could we assemble together, and consider collectively, the variety of effects and appearances which are connected with the projection of shadows, including such as are due to a single lamp, to several lights, and those which are produced by the sun itself, the aspects and shapes assumed by the shadows projected, could not fail

to strike us forcibly, and to afford that interest which results from boundless variety proceeding from simple causes, and, in many instances, from one uniform principle.

When the light of the sun which is admitted through the porticoes or open tracery of some vast architectural pile, produces shadows which may be observed simultaneously to advance, to recede, to revolve round some pivot or centre, to bend or to straighten as they traverse curved or uniform surfaces, assuming most various and intricate shapes,—the result almost reminds one of some gigantic scheme of clockwork, the parts of which, however dissimilar and various in their forms and movements, alike obey one common principle of motion. If considered in connection with the ramifications of the skeleton forest, or with the gigantic forms of mountains, nature appears to have traced, herself, figures remarkable either for their intricate variety or for their stupendous scale; whereas, in the various regular shapes which result from the projected shadows of buildings, she appears playfully to have mingled that unity and order which govern her universal principles, with the symmetry of form which art so fondly adopts.

Produced in space from a source almost too remote for conception, these effects are characterized by that complexity which results, firstly, from the various relations of the primary source of light to the bodies which it illuminates; secondly, from the dissimilar shapes of these bodies; and, thirdly, from the varying direction of the surfaces on which their shadows are projected: the result being definitively exposed to those

further modifications which depend on the unequal perspective influence to which the surfaces receiving the shadows are themselves subjected. The effects which are due to these combined causes, attain sometimes, in connection with architectural buildings, an elaborate character, such as it would seem almost beyond the combined powers of geometry and perspective to unravel: nevertheless, there are few of these results which a little diligent research cannot explain in detail, and transfer to the canvas with a degree of precision which more than equals what is usually demanded of the representation of any of nature's appearances. In fact, we possess but very limited means of appreciating the form and position of the shadows which are presented to us by nature; which renders unnecessary the attainment of the same degree of precision in this as in the other branches of perspective. The apparent position of the sun, or of any other remote luminary, relatively to the objects which immediately surround us, is, itself, from the want of points of connection, involved in great uncertainty; unless, from the misty state of the atmosphere, there be visible rays which may serve to point out the direction of the luminous body.

Definition of Projected and Local Shadows.— By shadows in general we understand a subtraction or diminution of the light which falls upon the surfaces of bodies: but the terminology of art distinguishes shadows into two kinds, local and projected shadows. The local or fixed shadow is limited to the side of an object which is turned away from the light: the projected shadow is

produced, on any given object, by the interposition of another object between it and the principal source of light.

The depth of a shadow, as has been elsewhere mentioned, is proportionate to the absence of secondary or reflected lights: but the local shadows are generally less intense than the projected shadows, because in most cases they receive more reflected light; the reason of which is, that the surface on which falls the projected shadow is situated opposite to the shady side of the object projecting it, whereas the object itself receives unobstructed the light which is reflected from the sky and from various other objects in sunshine. There are, however, cases in which local shadows are darker than projected ones; as for instance, when the object which projects the shadow is small; in which case, whilst it intercepts the direct rays of the luminary, it does not obstruct the general light diffused throughout the atmosphere.

The transition from light to shade constitutes the boundary of a shadow. Thus, when local, it is resolved entirely by that portion of the object which is turned away from the luminary; when projected, it is determined by the direction of the rays which immediately surround the intervening object, and depends, not only on the size and form of the object, but also on the magnitude and position of the luminary, and on the direction of the surface on which the shadow is projected.

When the luminary or primary light is smaller than the object which projects the shadow, as in the case of a candle lighting ordinary-sized objects, the shadow in-

creases in size with its distance from the object, without materially losing the relative precision of its outline. When the luminary is larger than the object, as in the case of a large fire throwing its light on objects of a less diameter, the result is, firstly, a complete or true shadow which diminishes with increased distances from the object, and, secondly, a half-shadow or penumbra which spreads or widens as it is projected further, becoming proportionately more faint and indistinct. The combined effect thus presents two cones or pyramids, one within the other: the inner one, contracting as it advances, has its apex turned away from the object; whilst the other, spreading as it advances, has its apex (which is truncated) turned towards the object. The extension of the true shadow, and of the penumbra, is determined by the relative dimensions of the source of the light and of the intervening object.

The light from a window forms this double shadow with the smaller objects in a room, unless the effect be disturbed by the light from other windows. It is produced, likewise, more or less, in connection with every object which is illumined by the direct rays of the sun; but the smallness of the angle or apparent diameter of the sun's disc, renders the penumbra very inconsiderable for the shadows of objects which are projected on neighbouring surfaces. In proportion, however, as the object is more removed from the surface upon which its shadow is thrown, the penumbra becomes more extended, and the edge of the shadow proportionately uncertain and diffuse. Thus, close shadows in sunshine should always be made with a sharp edge, and the shadows of distant objects.

under the same circumstances, with a softened edge, passing gradually into light.

Effects of the Diffusion of Shadows further explained.—I will introduce an instance, open to every one's observation, of those differences in the appearance of shadows which depend on the distance of the objects which produce them. Those leaves of trees which are nearest to the ground produce shadows with distinct and sharp edges, and those furthest from it, shadows which are diffuse and uncertain. It may also be remarked, that the patches of light which appear on the ground under a canopy of foliage, do not always take the form of the intervals through which the light of the sun is admitted; but when the distance is great between the ground and the openings in the leaves, they take a form more or less circular. Thus, if you mark the patches of sunshine on a walk under a grove of trees, you will observe that some are diffuse, and at the same time nearly circular; whereas others have a distinct edge, showing the form of the leaf projecting the shadow, and the exact shape of the opening through which the light of the sun is admitted. In the case of a large tree, the patches of sunshine which appear in that part of the shadow which corresponds to the top of the tree, are rounded and diffuse; whilst those which chequer the shadow of the inferior branches, are irregular, distinct, and conformable to the character of the leaves. It is evident that the principle which governs this little phenomenon, so familiar in its effects, is the crossing, which takes place in every hole or contracted space, of the rays

of light which proceed from a luminary larger than that space. When the hole or opening is very small in proportion to the diameter of the luminary, as well as to the distance or remoteness of the surface on which its rays are projected, the patch or gleam of light which appears on this surface takes the form of the luminary or primary light, rather than of the hole through which it is admitted. The light of a lamp or candle projected on a white sheet of paper, through a small round hole in a card or board, takes, at a certain distance from the focus of the rays, the elongated shape of the flame, and not the round shape of the hole: and proceeding in our inductions by analogy, we must come to the conclusion that, in the case of the sun's rays admitted through the intervals of foliage, the shape of the space or interval being irregular, and the sun or luminary being round, the patch of light will not take the irregular shape of the interval, but the round shape of the sun. When, however, the surface subjected to this impression of light and shadow, is so near the opening in the trees admitting the light, that the rays cross each other but in a very small degree, the form of the opening prevails over that of the luminary, in the gleam of light which it projects.

It may be here remarked, that the thickness of the atmosphere does not diminish the precision of the outline of a shadow. It renders it pale and faint; but, as long as the sun's rays can penetrate the cloud or mist, the outline of the shadow remains distinct. This is seldom closely attended to in paintings: and the distinctness of the shadow certainly becomes very embar-

rassing, when the objects projecting it have intricate or marked forms, as in the case of figures combined with variously shaped objects. The method most usually practised (though rather incorrect) is to put in the shadows vanishing gradually as they spread from the foot of the object projecting them; as would be the case if they were lighted by a bright cloud or bright sky, and not by the immediate rays of the sun. This method is consistent only with the nature of the shadows which result from an "effect of light."

With a clear atmosphere, and bright sunshine, the convergence of the true shadow, and the divergence of the penumbra, are very apparent on the ground on which a staff or pole is placed erect, so as to intercept the sun's rays. My attention was first called to this point by the appearance presented by the shadow of a lofty pole on the summit of the Righi, toward sunset; observing that the width of the entire shadow, including the penumbra, was very considerable at the extremity furthest from the foot of the pole. I have since endeavoured to ascertain rather more precisely, the proportion of this divergence of the penumbra or half-shadow, by fixing in the ground a staff with a quadrangular piece of cardboard fastened at the top, destined to intercept the sun's rays. The extension of the entire shadow or penumbra, allowing for slight differences dependent on the intensity of the shadow, and the manner of appreciating its edge or boundary, was equal to about one inch for a distance of ten feet, and the contraction of the true or total shadow in the same proportion; the width of the cardboard being three inches, that of the penumbra, at a distance

of ten feet, on an average four inches, and the width of the true shadow two inches. Proceeding by calculation to the solution of this question, nearly the same results would be arrived at, admitting the apparent diameter of the sun to be equal to one half a degree.

The extension of the sun's penumbra becomes very remarkable in the shadow of a lofty mountain: and I have observed one, whose summit was about a league and a half off, to form, as the sun rose behind it, a penumbra two or three hundred yards in width. At the immense distances, however, at which these projected shadows are generally seen in the Alps, this extraordinary width of the penumbra produces no other effect than that of softening the boundary line. The shadow of the Righi at sunrise, as seen from its summit, forms a distinct pyramid, stretching out over lakes, villages, and inferior mountains, till its apex reaches the Jura.

It is interesting to trace, by means of these intermediate connections, the relation between the slight faintness which extends over the edges of shadows on the smallest scale, and the transparent penumbra which the earth projects on the moon's surface at the period of its eclipse, before its disc becomes entirely hidden by the cone of true shadow.

Ray of Shadow projected through Space.—Those appearances which sometimes occur on high mountains, and are known in Germany by the name of *Schattenbild*, give a precise idea of the nature of the cone of shade which is projected through space, before its effect

becomes visible on some opaque body. On these occasions, the shadow of the beholder, as well as of the persons and objects which immediately surround him, appears to be impinged upon a cloud or mist, as the sun ascends above the horizon in the opposite direction; but the shadow of the observer himself appears most perfect, while those of neighbouring objects become less so in proportion as they are more removed from the spot which he occupies. The reason of this is, that, as the shadow is only projected on semi-transparent vapour, it requires that it should be seen to a considerable depth in order to appear distinct. Now, as the observer looks in a direction exactly corresponding to that of the rays by which he is surrounded, he sees, on the cloud of mist, the whole depth of his own shadow; his eye follows everywhere the direction of its boundary; whereas, with respect to neighbouring shadows, he sees them more or less sidewards, his eye partly crosses them in their thickness, and they become deficient both in form and depth. The iris which accompanies these images, and adds so much to the magic of their effect, is, I believe, perfectly similar to those which are frequently seen on the morning mists of lakes and rivers.

Owing to the almost infinite distance at which the sun is situated from us, compared with that which separates one from another the objects subjected to our notice on the earth's surface, the direction of the sun's rays may be considered to be perfectly parallel with regard to all those objects which the eye can embrace at once; although the enormous volume of the sun itself causes a certain degree of convergence of its rays, slightly

affecting the appearance of individual shadows. Practically speaking, however, the shadows of the sun may be regarded as perfect illustrations of the phenomena which are due to parallel rays of light.

Theoretical Considerations on the Projection of Shadows.—Before considering the more abstruse principles of projected shadows, I will bring home to the reader those simple facts which he may have daily opportunities of observing. A projected shadow has its greatest extension, when the direction of the rays is nearest to one which is perpendicular to that of the intercepting body, and to parallelism with the plane on which the shadow is thrown; and the least extension when the direction of the rays is parallel to the projecting body, and perpendicular to the plane: but in the former case the projected shadow disappears, when, the parallelism of the rays and of the receiving surface being perfect, it becomes absorbed in the prevailing local shadow; as it also vanishes in the latter case, when the intercepting body fills up the site of its own shadow.

Between these two opposite points, the projected shadow obtains all degrees of extension and contraction, according to the increased or diminished obliquity of the rays, relatively to the surface on which they fall. This is exemplified by the shadow of an upright object, which the declining sun casts upon the level ground; as well as by the shadow of an advancing roof or of a bulging sill, which the noon-day sun projects downwards on the vertical surface of a wall. But if the shadow reaches the earth, its increased extension there ceases; in the same manner as

the lengthened shadow of a man, or of a carriage, on a road, ceases to be so on an upright wall or bank, on which the rays of the setting sun strike almost perpendicularly. Thus it is that a shadow becomes more or less lengthened according as the plane on which it is cast deviates more or less from a direction perpendicular to that of the rays producing the shadow. The shadow of a staff half as long again as another staff placed in the same direction, may become six times as long, if it reaches a point where there is a break in the direction of the surface on which it is cast; whilst a much greater difference in the length of two objects becomes very trifling as to the length of their shadows, if the longer shadow of the two reaches a plane more perpendicular to the rays which project it, than that on which the shorter shadow appears.

I will now proceed to the solution of one or two abstract questions; for here, as elsewhere, it is by seeking out the root of the inquiry that general and comprehensive views are obtained, and the minor particulars rendered more accessible and easy. The propositions which follow are not intended as a substitute for practical examples of shadows which are projected in various ways; but if entered into and well considered, they may tend, in some measure, to remove that uncertainty which generally exists concerning the nature and origin of those effects which are only practically illustrated. The forms of projected shadows have been less studied in this country than in France; as has been remarked by Mr. Gwilt, whose small work on the projection of shadows seems to offer (if I may judge from a summary

perusal) much that is practically useful, in a condensed form.*

Shadow of the Geometrical Point, and of the Right Line.—Let us observe, firstly, what conditions are peculiar to the shadow of a geometrical point. All considerations of form and extension are necessarily excluded; since, whether the receiving surface extend obliquely or not, with reference to the direction of the rays, the shadow of a point is neither lengthened nor shortened, nor influenced in any way whatever as to its form. The shadow of a point is therefore liable to no other changes with reference to the projector,† than those of distance and relative position; the remoteness of the shadow depending solely on the distance of the surface which receives it, whereas the position of the shadow is influenced by distance associated with the inclination of the rays.

I will now define the right line, which enters into the composition of most regular figures, before alluding to its shadow. The right line has this peculiar to itself, that it is parallel to any surface, of which it might, as it were, become the axis of evolution. For instance, any vertical surface whatever may be made to turn round a vertical line; consequently, the right line continues to remain parallel to that surface at any period of its evo-

* "Sciography, or Examples of Shadows;" 1 vol. 8vo., by J. Gwilt.

† To avoid circumlocution, I have had recourse to two or three conventional terms. The *projector* implies the object projecting a shadow; and the *receiving surface*, the surface on which a shadow is thrown. The expressions *vertical and horizontal inclination* have likewise been used to express the direction of the sun's rays, with reference to that of other objects.

lution: or, what comes to the same thing, the right line, if upright, remains parallel to every vertical surface, whatever be its horizontal inclination; and, if level, to every horizontal surface, whatever be its vertical inclination.

The same applies to the *shadow* of a right line. It remains unchanged by any deviation in the direction of the surface on which it is projected, in a plane which is at right angles with the projector. This may be better understood by alluding to the plane of a shadow as projected through space. The interval which is comprised between the two extremities of a right line and the surface which receives its shadow, constitutes the plane of that shadow. Thus, any change in the direction of a uniform surface, which takes place in a plane which is at right angles with the plane of the shadow, involves no change whatever in the direction or in the form of the projected shadow: whereas, those surfaces which are subjected to a change in their direction conformably to the plane of the projected shadow, induce a corresponding change in the apparent direction of the shadow; and all curved surfaces, whose curvature corresponds with that of the projected shadow, induce a change in its apparent form which is proportionate to their curvature.

The conditions of change to which the shadow of the right line is liable, on *plane* surfaces having various inclinations with regard to the object, are those of position, direction, and extension or length. No curved or distorted forms can result, whatever be the relative inclination of the object and of the surface.

Shadows projected by Objects having two Extensions, or one Plane.—The shadow of the right line, whatever be its direction, being subjected to no other change than that of position on a parallel surface, a figure which extends in a uniform plane (being composed of a series of parallel right lines), projects, on the parallel surface, a regular and conformable shadow. Bodies extending in a uniform plane, project, therefore, a shadow the shape of which differs from their own, only on surfaces which are not parallel. But the parallelism of the surface and the object, is not a condition necessary to the uniformity of the projected shadow. It has the same shape as the projecting body, on a surface extending at right angles with it, whenever the inclination of the rays is equal to 45°: likewise at all intermediate angles, with determinate inclinations of the rays; provided these relations do not involve a departure of either surface from a common axis of inclination.

When the surface which receives the shadow presents indeterminate variations in its relative degree of inclination with the projector, at the same time that it maintains the same axis of inclination, no other changes than that of extension affect the form of the shadow, which becomes lengthened or shortened in a certain progression, as the direction of the two surfaces varies relatively to that of the rays. With these conditions of change, the plane of the shadow, resulting from the vertical inclination of the rays in connection with the position of the object, if upright, continues to remain parallel with the common axis of inclination of the two surfaces. Hence arises the

impression, that the shadow, though differing in length, remains to a certain extent conformable to the projecting object.

There is yet another condition of the projector and of the opposed surface, which, at the same time that it admits of a considerable amount of change in the position of the latter, does not interfere with the apparent regularity of the projected shadow. It is when the receiving surface remains parallel to an axis having any amount of inclination with regard to the projector, in a plane which is that of the projected shadow. The changes here referred to, in the direction of the receiving surface, are those to which it would be subjected if moved round a cylinder, but remaining during its evolution parallel with its sides. The relative positions of the luminary, of the object, and of the cylinder, would be determined by a right line passing through the centre of each, and marking, at the same time, the direction of the rays. The cylinder might deviate to any extent in the direction of this right line, and the surface having a uniform plane might deviate to any extent (at which the shadow would remain visible), in a direction which is parallel to the sides of the cylinder, without any apparent diminution being caused, by these changes, of the regularity of the shadow. It would be lengthened in proportion to the inclination of the cylinder, and widened in proportion to the inclination of the surface in a direction at right angles with the inclination of the cylinder; but the shadow of any rectangular object would, under these varying circumstances, remain square, on the flat sur-

face. A plane thus diagonally disposed with regard to the object, forms a corresponding section of the column of shadow which is projected through space; consequently, the extent of superficies obscured exceeds the width of the object. The widening of the shadow produced according to this principle, may be frequently observed in nature. Diagram 6, with the shadow of the chimney thrown across the inclined roof, represents one of the numerous instances which occur as it were accidentally.

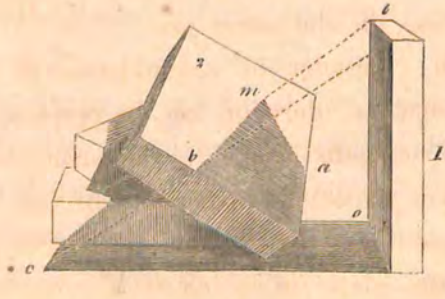
Fig. 6.

Distorted Shadows.—Whenever the surface on which a shadow is projected is parallel to the object projecting the shadow, the figure of the latter, as before mentioned, is conformable to the shape of the object, of which we thus trace the perfect profile in the boundary-line of the shadow. But it may be remarked, that when the surface which takes the shadow is situated at right angles, or nearly so, with the form which projects it, the shadow-line projected by the sides of the object conveys the impression of a streak or ray of shadow, rather than of any definite form referable to that of the object itself. This is exemplified by the shadows of all upright objects, when thrown upon the level ground. And when the surface crossed by a projected shadow is neither at right angles, nor parallel, with the projecting object, the shadow-boundary seems to partake partly of the nature of a ray of shade, and partly of the charac-

teristic appearance of the projecting object. In proportion as the relative direction of the form which projects and of the surface which receives the shadow, corresponds, and approaches to parallelism, the form of the shadow is the more assimilated to that of the object: but in proportion as the direction of the surface which receives the shadow differs from that of the object projecting it, so much the more do the shadow-boundaries convey the impression of streaks or rays of shade.

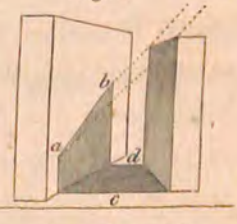
It is when the inclination of each surface is in a different plane, that these transition relations in the respective directions of both cause the form of the shadow thus projected to appear twisted or distorted. On these half-oblique surfaces the eye cannot satisfactorily trace and follow out the connection between the boundary-line of the shadow and that of the object; nevertheless, a sufficient resemblance prevails to prevent the observer from substituting altogether the impression of the ray of shadow for that of the object's outline. Thus in diagram 7, the shadow from *a* to *m*,

Fig. 7.



on the surface of the inclined stone, does not appear to express the direction of the rays of light so completely as the short part of the shadow which extends on the level ground at *o*, from the foot of the upright stone; and yet it does not appear quite conformable to the upright boundary-line *l o* of that stone: and likewise that portion of the shadow which is projected by the top of the same stone, extending on the inclined stone from *m* to *b*, appears much less conformable to the boundary with which it is connected, than where projected on the level ground at *c*. In fact, it is something between the ray of shade, (the impression of which would predominate still more if the relative direction of the stone No. 2 to the stone No. 1 were more oblique,) and a shadow definite and conformable to its object, (the impression of which would prevail entirely if the positions of the two stones were parallel). If we refer to Fig. 8, we shall observe that, owing to the oblique position of the two upright stones, the shadow line *a b*, instead of being horizontal, as it would be if the stones were parallel, partakes partly of the inclination of the rays, and loses, in the same proportion, that character of resemblance to the object, which is remarked more or less in projected shadows.

Fig. 8.



Let us investigate more fully the principles on which the twisted or distorted appearance of the shadow depends. Speaking of the shadow of the right line, I have alluded to the plane in which it is projected through space. Now, as bodies having two extensions, are cir-

cumscribed, if angular, by right lines having likewise two kinds of extension, it becomes necessary to distinguish the plane of projection of one of these classes of lines from that of the other; that is to say, to define, if the body be upright, the figure of the shadow which is projected through space, by connecting its sides, vertical and horizontal, with the lateral and upper boundaries of the object,—a connection which at once calls for the application of the terms which are referable to the vertical and to the horizontal inclination of the rays of light.

Availing myself of these conventional expressions, I proceed to observe, that the shadow of an object having two extensions does not become distorted by a change in the direction of the surface projecting and of the surface receiving it, provided this change affect the relations of both with regard to one inclination of the rays only. For instance, (as has already been agreed,) the shadow of an upright object is regular on a surface having any degree of vertical inclination in a plane which is perpendicular to both surfaces; for all changes in the direction of two surfaces, conformably to a plane which is perpendicular to both, can affect their relative position with regard to one inclination of the rays only, namely the vertical one,—producing no disturbance with regard to the other, namely the horizontal inclination. Thus, with regard to the horizontal inclination of the rays, A, B, and C, (Figs. 9 & 10,) are placed in exactly the same circumstances, however different from each other with regard to the vertical inclination of the rays; and although their shadows are variously lengthened or

contracted, according to the relative direction of the plane which intercepts the sun's rays, and of that which receives the shadow, the regularity of the shadow is in no case disturbed.*

Fig. 9.

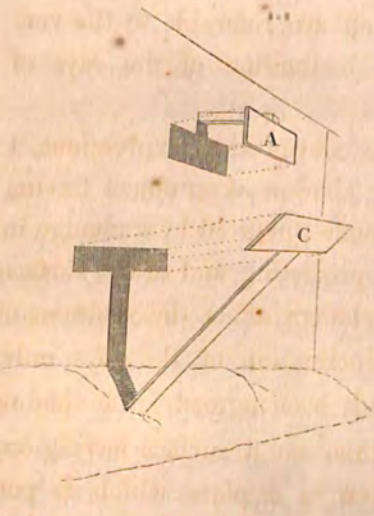
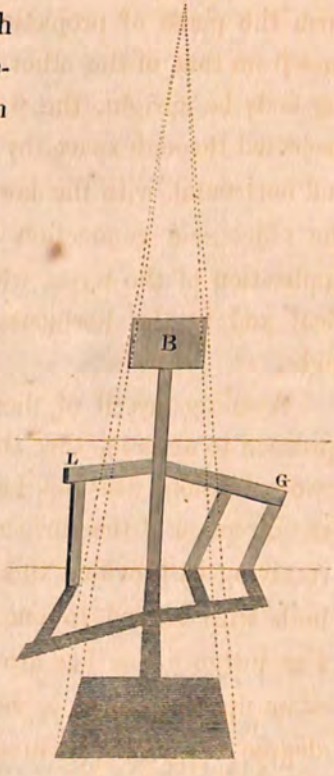


Fig. 10.

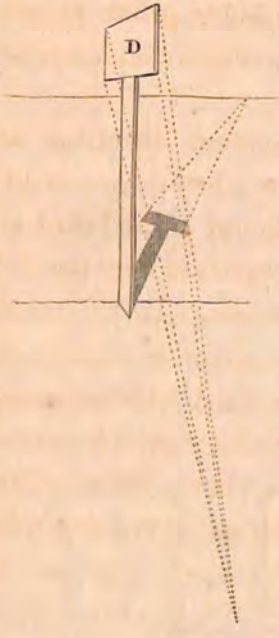


The projected shadow becomes amorphous, or in appearance distorted, when the interposed object, having already relations different to those of the surface receiving the shadow with regard to one inclination of the rays, presents likewise different relations with regard to

* The difference in the positions of these objects with reference to the observer, is independent of the inclination of the rays: and it may perhaps be as well that the reader should be able to divest his impressions of the influence of perspective and arrangement, with regard to figures to which the principles under consideration equally apply.

the other. Thus, the upright board D, projects its shadow on a level surface, or one which differs with regard to the vertical inclination of the rays; whilst at the same time, owing to its oblique position, and consequently to its different axis of inclination, it has nothing in common with the level surface with regard to the horizontal inclination of the rays. Again referring to diagram 10, it will be seen by the shadow of the post and rail G, that a change in the direction of the object, which is referable to the vertical inclination of the rays only, effects a *corresponding* change in the apparent form of the shadow. But when the direction of the rail and of its support (see L, in the same figure,) becomes oblique with regard to the horizontal inclination of the rays, the relationship between the plane projecting and the plane receiving the shadow, with reference to the direction of the light, is lessened, and the form of the shadow differs more decidedly from that of the object.

Fig. 11.

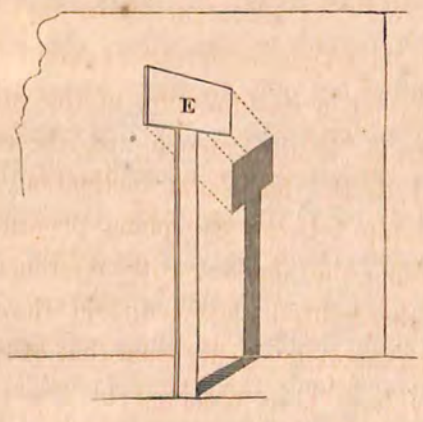


As may have been observed by the references to diagrams 7 and 8, the apparent distortion of the shadow arises not less from a diagonal direction of the surface on which it is thrown, than from a diagonal position of the object projecting the shadow. When their rela-

tions to the direction of the light are respectively the same, corresponding results must necessarily follow. But it will be unnecessary to consider what degree of influence more complicated relations would exercise on the forms of projected shadows.

Diagram 12 exemplifies an apparent distortion or twisting of the shadow, resulting from a less degree of difference in the relations of the two planes. The board E, and the wall, being upright, both surfaces are here parallel with regard to one of their extensions. In this case, the projected shadow becomes irregular or deformed, only when the rays of light are inclined with reference to the sides or boundaries of the object which extend in the direction in which the two planes differ. The shadow of the board E, projected on a vertical wall,

Fig. 12.



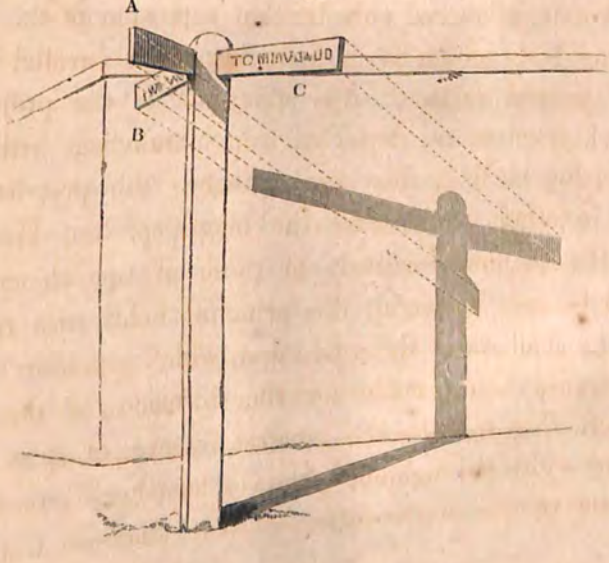
though lengthened or shortened, would remain regular with any horizontal inclination of the rays, if unaccompanied by a vertical inclination; because the horizontal inclination affects those sides only of the object,

which are parallel to the surface on which the shadow is projected, whereas the vertical inclination regards those boundaries of the interposed object, the direction of whose extension is foreign to the plane of the surface which receives the shadow. But when the rays have a vertical inclination, these boundaries of the shadow are projected lower down in one part than in another, owing to the greater distance traversed by the rays: consequently they obtain angular relations with the other sides or boundaries of the shadow, different to those which determine the form of the object projecting the shadow.

I will here give a modified example of the lengthening of shadows which takes place according to the principles already stated. When two plane surfaces, the one projecting a shadow and the other receiving it, are parallel with regard to one of their inclinations, and not with regard to the other, the length of the shadow is influenced only by that extension of the projecting body which is in a direction not parallel with the opposed surface. Any extension of the projector which involves no deviation from parallelism with the receiving surface, does not influence the proportions, or, in other words, alter the length or the breadth, of the shadow, relatively to those of the object. It will be seen how truly this principle holds with regard to the shadows of the guide-post, which maintain (some allowance being made for the diffusion of the rays where they traverse the greatest interval of space) the same width throughout, whatever lengthening or shortening results, in the forms of these shadows, from the

various directions in which the arms of the post extend with regard to the surface on which the shadows impinge, as well as to the direction of the rays. The extension of the arm B, of the post, in the direction of the wall, brings the shadow projected by it very close to its extremity. Were it a little longer, the ends of the arm and of its shadow would appear to meet. The shadow of this arm is the longest, because its direction is nearest to the perpendicular at the same time relatively to the wall and relatively to the rays; whereas, the shadow of the arm A is the shortest, because it is most conformable to the direction of the rays. The relations of the direction of the light, and of that of the surface receiving the shadow, with regard to the arm of the post C, are such as to render the length of its shadow intermediate between that of the two other shadows.

Fig. 13.



Shadows of Solid Bodies.—I shall not enter into the intricate relations of the shadow to the projector, which have reference to cubical and other solid forms, and which could not, without great difficulty, be reduced to general principles: but I shall confine myself to the remark, that the shadows of solid bodies, if considered independently of the plane of the surface on which they are projected, are most extended when the direction of the interposed body is such, that the rays of light would intersect the plane of its greatest diameter at right angles. It necessarily follows, that the position of the object required in order that the rays of light should meet its greatest diagonal plane at right angles, must vary, in every individual case, with its form.

On the relative Situation of the Shadow, of the Object, and of the Luminary.—Those changes in the situation of a shadow, which depend on the progressional motion of the sun, are always (unless in tropical regions) of a complex nature: that is to say, they never deviate from any given point in one direction, without deviating at the same time in some other direction; or, they are not subjected to any vertical change, without being at the same time subjected to a horizontal change. The shadow of an upright object is never seen to change its position horizontally on a vertical surface, without at the same time either rising higher, or falling lower down: and such is the predominance of this simultaneous progression in the shadows of objects, dependent on the complex motion either of the sun or of the moon, that any other kind of displacement seems an

exception, and, though it may be less intricate, can only be produced artificially.

A simple change in the relative position of a shadow and of its object occurs, when a light is moved in a plane which is parallel at the same time with the object which projects and with the surface which receives the shadow. In this case, the projected shadow may be subjected to any amount of transposition in one given direction, without inducing any degree of change in another direction. Let us suppose a light projecting the shadow of an object on a vertical surface, to be moved horizontally: it is evident that the shadow of the object will continue to maintain a uniform level on the opposed surface, whatever be the extent of the horizontal transposition of the light. Instead of changing the position of the light, let us allow it to remain stationary: it will be perceived that the shadow which is projected by any successive portions of a right line, on points progressively more remote of an opposed surface, as the direction of the rays diverging from the light becomes more oblique, exemplifies a case corresponding with that of the light which is moved in a horizontal direction with regard to any given point projecting a shadow. For instance, the diverging rays of a lamp which are cut off by a rectilinear object, spread fan-shaped as they extend beyond this line or boundary, carrying its shadow to points at an uniform level on a parallel surface. Thus is adduced from the single light or luminary, an example of the increasing obliquity of the rays, relatively to the object which projects the shadow, and to the surface on which it is thrown, with-

out any change in the level of the shadow thus projected. As the horizontal divergence of the rays is increased, their vertical inclination is diminished proportionably; which compensates exactly for the increased length of the rays as they diverge more, and maintains the level of the shadow which is projected by them.

But if we suppose the displacement of the lamp or light to be the result of a combined motion in a direction parallel to the plane of the object projecting the shadow, and in a direction which is perpendicular to it, bringing the light closer to the object, the shadow which is projected on a parallel upright surface no longer maintains the same level, as its position changes with the diagonal direction of the rays. Thus, if the light which casts the shadow of the square A on the square B, (fig. 14) is moved horizontally nearer to its surface, at the same time that it is moved toward the observer, the shadow of A becomes shifted, by the effect of this combined removal of the light, to a position on the surface B, at the same time lower down and further off. But the inferior position of the shadow, as projected at *n*, is due in this case, not to a greater inclination of the rays, but to the greater distance traversed by them; for the change from *m* to *n*, of the ray projected by the corner *l*, would not be accompanied by any increase of its inclination, if resulting from the horizontal displacement of a light, equal in a direction

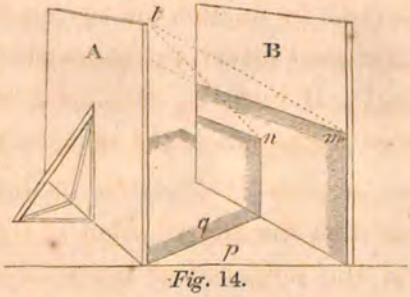


Fig. 14.

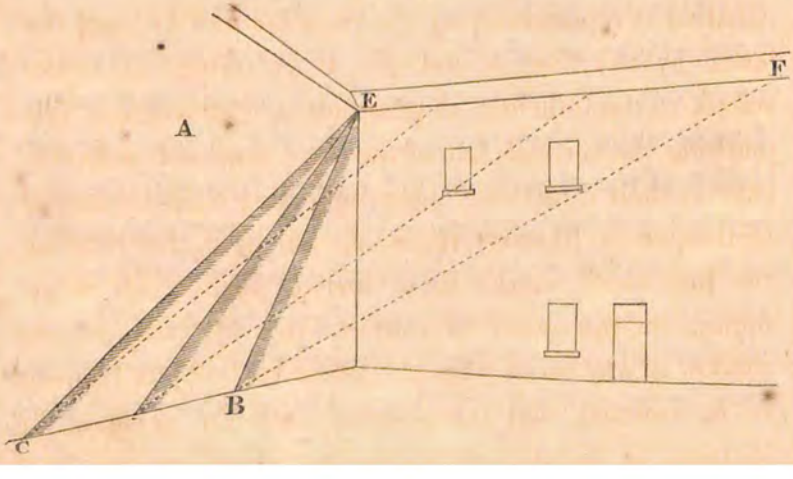
parallel with the surface A, and in a direction which is perpendicular to it.

But the translocation of shadows which is the result of the complex progressional motion of the sun, never manifests itself to us under these circumstances; for the vertical or ascensional motion of the sun is added to two kinds of horizontal progression. Hence, if we consider the shadow projected by A, on the surface B, to be due to the sun, instead of being the result of an artificial light, its translocation from *m* to *n* would necessarily be the result of a combined simultaneous progression in three directions,—two of them referable to horizontal, the other to vertical progress; the combined lateral changes in the position of the sun being at all periods of the day associated with those of its ascent or of its decline. These simultaneous changes in the horizontal and in the vertical inclination of the sun's rays, are with difficulty expressed either by geometrical or by perspective drawing. If lines be employed to define on a flat surface the inclination of the rays, each change in their direction necessarily involves, in the representation, that increased or diminished slant of the lines which depends upon the influence of perspective recedence. A glance at the figure last alluded to suffices to show, that the line *l m*, which defines the elevation of the shadow on the surface B, marks the true vertical inclination of the rays, only when the shadow of A is projected at right angles with the surface B, or in a direction parallel to its extremity; and that when the shadow is projected diagonally, the real inclination of the rays becomes disguised by perspective influence. Thus

in diagrams, as indeed in all illustrations of projected shadows, on a flat surface, the real inclination of the rays is not easily distinguishable from their perspective convergence; a point which will presently be further explained.

The concealment of the true direction of the rays by the influence of perspective, is perhaps rendered more striking in diagram 15, where, as the inclination of the shadow boundary as projected on the wall A, increases progressively from C to B, the inclination of the lines defining the direction of the rays decreases. It should be observed, that although the direction of the shadow boundary deviates more from the perpendicular at C than at B, this is not due to a less decided inclination of the rays. It is, as shown in the diagram, the result of altered relations in the direction of the rays of light, with reference to the line E F of the building which projects the shadow. It may be further remarked, that the shadow-line is the more expressive of the true direction of the rays, in proportion as these are nearer to parallel-

Fig. 15.



ism with the surface on which they project the shadow; so that if both extended in the same plane, the projected shadow, if distinguishable from local shade, would mark the exact inclination of the sunbeam.

PROCESS USUALLY EMPLOYED FOR PUTTING PROJECTED SHADOWS INTO PERSPECTIVE.

Let us now proceed to consider the methods which may be employed for determining, on the flat surface of the canvas, the position as well as the form of projected shadows. This operation is facilitated by supposing the rays which proceed from the sun to be visible, and by defining their inclination with reference to the surfaces of those bodies with which they become connected. This inclination, as has already been stated, may be designated *vertical* and *horizontal.* The vertical inclination of the rays has reference to horizontal surfaces, and their horizontal inclination has reference to vertical surfaces, the horizontal extension of which is determinate. In diagram 14, the former inclination is represented by the lines *l m* and *l n*, and the latter by the lines *p* and *q*. It is owing, as before stated, to the influence of perspective, that a single line marking the vertical fall of the rays does not suffice to express their direction. One indicating their horizontal inclination is likewise required, which, by intercepting the line which marks their vertical inclination, determines, at the point of contact, the extremity of the shadow of any given object. When such object happens to be isolated, and unconnected with the ground, the position of its shadow is equally found on the level

surface by merely tracing, in addition to the process alluded to, a temporary vertical line down to the foot of the point or object of which the position of the shadow is required. The position of any gleam of sunshine in a mass of projected shadow, as produced by a loophole or open window, is found in this manner; as may be, indeed, that of any projected shadow, however intricate or elaborate the building, or object of any kind, with which it is connected. Thus, however great may appear the difficulty resulting from complexity combined with precision in the forms of shadows, their projection on a uniform surface, such as the level soil, is one of the simplest processes which are connected with perspective. An inclined line drawn from the top of any given object till it meets another line drawn from the foot of the same object, determines, at the point of conjunction, the length and position of the projected shadow.

When the direction of the rays is parallel to the observer, the inclined line drawn from the summit of the object gives exactly the vertical inclination of the sun's rays, and all the lines which serve to define this inclination are made parallel; whilst the horizontal direction of the rays is rendered alike by parallel horizontal lines. When, however, the rays of light are not parallel to the observer, but either advance or recede, the lines which mark their vertical inclination, as well as those which indicate their horizontal inclination, are made to converge. When they are thrown toward the observer, or as it were out of the picture, as exemplified by the shadow of the upright post and board B, Fig. 10, p. 395, the boundary lines of the shadow converge towards the object which projects it, and their point of convergence

is situated on the horizon, immediately below the sun; whereas the point of convergence of the lines which mark the vertical inclination of the rays corresponds to the position of the sun itself. When (the sun being situated behind the observer,) the shadow is projected into the picture, the point of convergence of the lines which mark the vertical inclination of the rays is exactly opposite to the position of the sun, at a distance below the horizon equal to the elevation of the sun above it; whereas the point of convergence of the lines of the shadow itself is situated on the horizon, above the point of convergence of the rays of light. (See Fig. 11, p. 396.)

It is necessary, before proceeding further, to make a distinction between the perspective of the lines (to which I have hitherto confined myself,) forming as it were the sides of a shadow, and indicating the direction in which it is projected, and that of the terminal lines of the shadow, or of those which mark its extreme boundary, to which I will now refer. When the shadow of a receding building, or of any other object, is projected at right angles, or across the picture, there is but one vanishing point, which is that of the lines which mark the extreme boundary of the shadow; in which case, the same point of convergence is made to serve for the lines of the shadow and for those of the building: whereas, a shadow which is projected diagonally has, in addition to the point to which the lines marking the extreme boundary of the shadow converge, another vanishing point, (namely that first alluded to,) toward which tend those lines which mark the direction of the shadow, and the position of which deviates more or

less from the vanishing point of the lines constituting the extreme boundary or limit of the shadow, according to the direction more or less oblique in which the shadow is projected.

The shadows of curves, like their perspective forms, are found out by indicating a series of points on the line of the curve, the intervals between which are filled up by the eye. The same principles which are employed for determining the perspective of curved and other varying forms, are likewise applicable to their shadows, even though they should differ (according to the inclination of the rays, or to the obliqueness of their direction,) from the form of the object itself. The shadow of an arch becomes depressed or flattened with the increased inclination of the rays, or takes a skew form from their diagonal direction. And in the delineation of these figures, resulting from the projection of shadows on a level surface, the same perspective rules apply which are had recourse to in the tracing of regular or of eccentric ellipses. In fact, the forms of shadows which are projected on a flat and uniform surface, are to be considered merely as figures or patterns: they are included in the same general perspective conditions as if they belonged to that surface.

When the shadow is projected sidewards or transversely, each part or division bears exactly the same relation to the other parts of the shadow, as the same part of the object does to the other parts; but when diagonally, either thrown back or projected forward, these relations of proportion in the parts of a shadow become unequally modified by the perspective of the

plane receiving it, according as the part of the surface where it is projected advances or retires. The extension of the shadow of a part of a building which advances more than the rest, is exactly proportionate, when projected sidewards, or in a direction parallel to the observer, to that of the corresponding portion of the building itself. But when the shadow, under these circumstances, is represented as projected forward on a level plane, it is necessary to increase its length in a progression which is proportionate to the perspective increase of equal spaces as they advance toward the observer. These perspective relations of the parts of a shadow to the whole, are determined in the manner usually employed for marking the progressive expansion or contraction of equal spaces on the perspective plane.

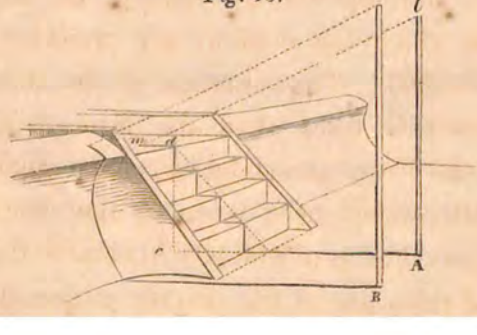
The required precision in the perspective of shadows is therefore obtained, in the first place, by finding out the position of any given point projecting a shadow, by means of lines connected with the leading points of the object, and which mark the vertical as well as the horizontal inclination of the rays; and, where the shadows of regular but complex forms are projected, by employing the same means for dividing space as are used in the perspective dissection of real objects.

Shadows projected on variously inclined Surfaces. —We may in most cases trace the form of a shadow on a surface which passes suddenly from one direction to another, by connecting the boundary lines of the shadow which are parallel to the object, with those which are projected at right angles. Most of the forms which are

connected with buildings afford alternately, transitions from the horizontal to the vertical direction, and *vice versâ:* and in these alternations, the shadows of upright objects change from the horizontal direction to the vertical one, and resume the former. Thus, the shadow of an upright object, thrown across a flight of steps, passes alternately, at the tread and riser of each step, from the direction which marks the track of the rays of light on the horizontal surface to the vertical direction, and from the latter back again to the former: and the connection of this broken line of shadow, at the angles or corners of the steps, completes the entire form of the shadow which is thrown across them.

When corresponding forms are thus repeated, there can be no difficulty either in finding out the direction of the projected shadow, or in determining its extremity, namely, the limit of its greatest extension; for, as we possess both the position and the direction of the shadow on one level surface, the usual means furnished by a line marking the vertical inclination of the rays, is rendered available for finding out its extreme boundary on surfaces which are situated at various elevations; the conjunction of this line (*l m*, Fig. 16) with one marking

Fig. 16.



the direction of the shadow wherever it might occur on a level surface, serving invariably to define the extremity of the shadow. A line drawn from the foot to the top of the flight of steps, gives at once the general direction of the shadow which is thrown across them, and assists in making out its direction on each separate step. Should the steps be deficient, or their shape so far defaced as to distort the shadow, or break its continuity until it reached a level surface above, a perpendicular line, *c d*, resting on the track of the ray (supposing it to be continued in its primitive direction), and raised till it met any determinate point on the level surface above, would serve in any case to mark the position of the shadow on this last plane. In this manner the length of a projected shadow is determined when its continuity is broken. Those forms of the shadow which correspond with the leading points of the object projecting it, or with the prominent parts of the surface crossed by it, are thus determined, by raising perpendiculars from the track of the shadow on the level surface, till they meet lines marking the vertical inclination of the rays.

The same degree of accuracy is not always attainable with regard to surfaces which extend in various directions; and that chiefly because the nature of the surfaces on which the shadows are projected cannot be precisely defined. The situation of the shadow is not more difficult to trace than the form of the surface which it obscures; uncertainty extends equally to both. If the reader refers once more to the diagram of the inclined stone, Fig. 7, p. 392, he will observe that the exact position of the point of the shadow projected at *m*, does

not depend alone on the inclination of the ray expressed by the line *l m*. It might have been carried beyond the point *m*, or have stopped short of it; and, with no other guide than the apparent position of the stone as represented to us by the diagram, we are not able to say with confidence whether the point of the shadow ought to be exactly where it is, a little lower down, or a little higher up. This would depend on the degree of inclination of the slanting stone; which itself is expressed by that of its boundary lines, with due reference to their convergence toward a vanishing point situated above the horizon. But, the furthest end of the inclined stone being without any immediate connection with the level plane, the eye has no guide in appreciating its degree of inclination; and its slightly converging boundary lines, as represented in the diagram, would be applied with equal correctness, according to its distance from the observer, to a square stone in a position not greatly differing from the horizontal, or to an oblong one in a position more erect.

The impression made by the appearance of the stone on the mind of an observer who incessantly alters his relations of distance, is perhaps that of a simultaneous and combined change in the proportions of the stone, (that is to say, in its relative length and width,) and in its degree of slant; the stone becoming less inclined with a near view than it is with a distant one. It is true that, in the adaptation to the position of the observer which regards the plane of inclination of one of the stones, the other has an equal share. Their relative position, and consequently that of the projected

shadow, cannot therefore vary on this last principle only. But when the proportions of the stone are involved, as is the case in the figure, from the want of a point of contact with a determinate plane, the shadow which is thrown across it by another object cannot be precisely determined. In the case here alluded to, the true position of the shadow could be fixed upon only if the *position* of the stone over which it extends were accurately made out; as, for instance, by giving, in a ground-plan, the horizontal extension of the object, and, on a scale of elevation, its exact height, or its degree of slope. But the uselessness of this method would soon become apparent, as applied to the definition of the boundaries of shadows on uneven surfaces; of which we are unable, even in nature, to ascertain without difficulty the precise direction, whilst the shadows themselves vary in shape and position during the very time we are engaged in this precise and accurate measurement. In the diagram last referred to, the inclined stone, although we may not feel satisfied whether it be an exact square or an oblong, we know at least to be of a regular shape. How much greater would be the uncertainty connected with the form and position of the shadow, if the shape of the stone itself were irregular.

It must now I think appear evident, that when, owing to the intricacy of the subject delineated, the relations of its parts become uncertain, it would be vain to seek to trace with the accuracy of a geometrical process, the position of the projected shadow. At the

same time, it would be evincing a want of correct drawing, to make any such deviations from truth, as would be apparent to the eye.

When the position of the leading points of a projected shadow is uncertain, the inclination of the boundary lines is likewise necessarily difficult to determine in a perspective drawing. I will here recapitulate the principal data which are connected with this question. In the first place, a twisted form of the shadow cannot result from a deviation of the surface receiving it from parallelism with the plane of the object, if the direction of the rays is at the same time conformable to the plane of that deviation. The two points next to be considered are, the degree of inclination of the plane of the projecting object and of the receiving surface relatively to each other, and the degree of inclination of the rays of light relatively to a plane which has the same relations to both. It should be further observed, that the change produced in the direction of a shadow takes place alike and to the same extent, by a deviation of the surface projecting, or of the surface receiving it, from a direction which is at right angles with one of the planes of the rays of light. In Fig. 7, which has been last considered, the deviation of the inclined stone from the plane of the upright one takes place in two directions simultaneously, and obtains, therefore, with regard to both these conditions of its surface, different relations to the direction of the rays. Hence it is, that the shadow of the vertical boundary of the upright stone, as projected across the inclined one, deviates from the perpendicular, whilst

the shadow of the level boundary of the same stone deviates from the horizontal.

I shall not enter further into the consideration of the complicated effects which are due to various directions in the plane of the object which intercepts the light, associated with the same diversity in the direction of the surface which receives the shadow. The principles heretofore given, if applied in detail and in connection with each other, will perhaps be found of some assistance in carrying out the more simple effects which are connected with the projection of shadows. Amongst the leading applications of these principles, it will especially be remembered, that the fulness of the shadow, and its conformity with the object, depend on the parallelism of the latter with the surface upon which it casts its shadow; that a change in the direction of the projector, which causes it at the same time to deviate from that of the receiving surface, and to approximate to the direction of the rays, produces invariably a shortening, contraction, or thinning, of the projected shadow; and that any change of direction, which is limited to one object (namely, to the receiving surface or to the projector), whilst the rays of light remain perpendicular to the other, can have no other result than the extension or the widening of the shadow, without influencing its regularity.

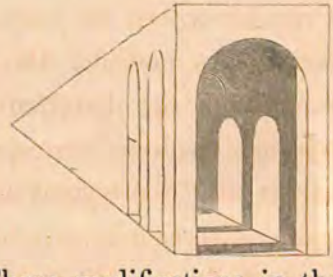
Shadows projected on irregular Surfaces.—I need only add a few general remarks to the foregoing definitions. The shadow of a right line, or of a straight

object, takes the direction, and indeed marks the form, of any surface across which it is thrown: it follows the curve of a concave surface, and the projection of a convex one; and, where other indications are wanting, may assist not a little in marking the bent or direction of any surface crossed by it. It will be seen that the shadows of the uprights A and B, Fig. 16, take, on reaching the upright or inclined surfaces, the exact direction of those surfaces. Under the projecting part of the parapet, the shadow of B is partly bent upon itself, following backward the track which it pursued on the level surface. But in tracing the shadows projected by regular objects on curved and sinuous surfaces, it is necessary to consider the forms of the latter in connection with the direction of the light. The forms of projected shadows correspond with those of the projections and depressions of the surface, only when its general direction is at right angles with that of the projected shadows. When the direction of the surface is oblique relatively to the plane of the shadow, the form of the latter becomes proportionably more sinuous, jagged, and broken; the intervals being wider where the shadow-line is interrupted by the hollows and depressions of the surface.

To these departures from the shape of any object in the shadow projected by it, dependent on its relations to the direction of the light, as well as to the surface upon which its shadow is thrown, are added, as has been already remarked, those contrasting differences in the appearance and character of both, which result from the

dissimilar perspective influence to which they are subjected; occasionally producing the strangest discrepancies in the relative forms of the shadow, and of the object which intercepts the light. Diagram 17 shows, in some measure, how far the form of a shadow may be changed by the unequal perspective influence to which the planes over which the projected shadow extends are subjected. The two receding arches, being seen very foreshortened, are proportionably narrow. The floor of the arcade, on which the shadows of the arches are first thrown, being somewhat less foreshortened, they here widen a little; and, where projected on the wall, opposite the arches, they widen considerably; as that wall, though parallel with the arches, recedes much less directly from the observer than do the arches themselves. These modifications in the forms of the shadow are due entirely to the perspective condition of the surfaces over which it extends, its real width being the same as that of the arch throughout. If we could suppose a door to be adjusted to one of the side arches in the diagram, and to be left partly open, the surface or plane of the door would be still more contracted, or perhaps disappear entirely; and yet its shadow, as projected under the archway, would very nearly fill up the whole space which is surrounded by the shadow of the arch; showing still more strikingly the effects resulting from a difference in the plane of the

Fig. 17.



body which intercepts the light, from that over which its shadow extends. The guide-post, Fig. 13, p. 399, has been chosen as a fit illustration of the effects which are due to perspective associated with other principles. The great dissimilarity of the kind of influence on which the forms of the shadows and those of the arms of the post depend, is rendered manifest by the entire want of connection and analogy in their appearance.

PERSPECTIVE OF REFLECTIONS.

GENERAL REMARKS.

Few circumstances afford a better proof of the superficial manner in which nature is generally observed, than the jumble which is continually made, of the appearances which belong to shadows and of those which pertain to reflections. There are some cases, indeed, as on a rough sea in cloudy weather, in which the reflections are so diffuse, and the shadows at the same so undefined, that they are not easily distinguished one from another, especially when both extend over the same area: but when persons who draw, and who it may be draw well, appear embarrassed, if asked whether the image which is cast by a tree on a smooth

lake or pool, is its reflection or its shadow, it strikes one that there must be something very superficial and defective in the manner in which art is usually taught. One simple consideration, however, will at once set at rest any doubts respecting the distinction between the reflection of an object and its shadow. The reflection changes its position continually with that of the observer; it seems to follow him wherever he goes, and does not remain stationary like the shadow, which is subjected to change, only when the object projecting it or the primary light itself is removed, and which remains unaffected by the position of the observer. Again, in order that a reflection be produced on a smooth surface, the object alone is required,—no light or luminary, as in the case of the shadow, need be looked for; unless, indeed, the object itself be wanting; in which case, the light is reflected, and becomes in fact the object. But such remarks as these may almost seem trivial to those who first observe nature, and then proceed to imitate her.

The great governing principle in all the phenomena of definite reflection, or, of reflection affording a distinct image, is, the throwing off of each ray, by the reflecting surface, in the same angle as that in which it falls upon it; and although hundreds, perhaps millions of rays, are transmitted in various directions from the object to the polished surface which reflects them, one pencil of these, only, if the surface be uniform, reaches the eye of the observer, and conveys to him the exact appearance of that portion of the object whence it is derived.

The immediate result of this principle that each ray is reflected in the angle of its incidence, is, that in proportion as the object, or the portion of the object, from which the ray proceeds, is further removed from the plane of the reflecting surface, it is thrown back or reflected from a part of that surface nearer to the observer. If he look down upon a smooth sheet of water, the higher the surrounding trees rise above the shore, the nearer their reflection seems to reach to the spot occupied by him; or, if he place himself opposite to an upright looking-glass, the further the objects which he sees there, are removed from it, provided it be in a direction perpendicular to its surface, the nearer will their image be reflected to that point of the glass or mirror, which is directly opposite to him. To this circumstance may be traced that condition which is peculiar to all reflected images, namely, that their position is the reverse of that of the primary objects. I will endeavour to bring this home to the mind of the reader.

The simple and immediate influence of perspective, causes invariably the objects which recede directly from the eye, to occupy, with respect to a plane parallel to the observer, (supposing them to be seen through it,) a point successively nearer to the position of his eye, in proportion to their removal. Now it has just been proved, that the same principle governs the apparent recedence of those objects which are reflected on a plane surface: they present themselves successively on parts of the reflecting surface more perpendicularly

under the eye, in proportion as they have the appearance of being situated further off. If we now consider this increasing apparent distance of the image or images reflected by the mirror, in connection with the increasing distance of the corresponding object or objects before it, we find the immediate result to be, the inverted position of the reflected image. Every projection of objects, which is away from the mirror, in a direction perpendicular to its plane, is reproduced by the image apparently situated beyond its surface, with exactly the opposite extension.

The relationship of position of the object and of its image, corresponds alone with reference to the intervening mirror, and not with reference to the observer, or to space. A figure which looks eastward, looks westward in the reflection, as a knife held with the handle one way, is reflected with the handle turned the opposite way. In the reality, as in the reflection, however, the handle, as I have placed the knife, is turned towards the glass, and the blade away from it. The plane of the glass, or the reflecting medium, is as it were midway between the object and the image: it constitutes the term of relationship between them; and, with reference to it, the position of both is identical.

Considered by itself, this turning round of the image, so that it meets the object end to end, front to front, does not convey with it any such impressions as are generally connected with a difference of appearance. It is only with reference to other associated impressions, which in most cases are foreign to our ideas respecting the position of objects, that this inversion of the reflected

image strikes us as having in it something extraordinary. What, for instance, will be the result, if the mirror be laid down horizontally? The case will then correspond with that presented by a pool of smooth water; with the only difference, that the reflecting surface will be smaller: the principle of the reflection is not in the least changed. The portion of an object which is most distant from the surface of the mirror in the reality, is, as before, most distant from that same surface in the reflection. But this causes, to our senses, a much greater departure from the natural result, than what was observed in the former position of the glass. The figure no longer appears turned round, but upside down: and this is the exact appearance which all objects have when reflected in water. Everything there is seen topsy-turvy, although this strange, unnatural effect, as it may seem to be, differs nothing in principle from the reflections which are formed in every plane reflector. Here, a principle influences our impressions, which has nothing to do with them when we look at objects which are reflected on vertical surfaces. Gravitation, which causes all bodies to fall to the earth, renders the appearance of objects which rise erect, and in opposition to this force, agreeable to our impressions of firmness and solidity,—in fact, right, and as we expect that they should be; whereas, with the opposite downward extension, are naturally associated impressions of fear and alarm. And, whereas the mere fact that upright objects are projected downwards when reflected on horizontal surfaces, conveys the impression of a great departure from the reality, the turning round

or inversion of the image in the vertical mirror, appears so natural, that the change in its position relatively to the object, is scarcely perceived.

The analogy which exists between the reflection in a mirror and that which takes place on the level surface of water, shows itself at once, when we look down at the reflection, in the water, of objects which are close by us. We then perceive that their under-side, or that which faces the water, chiefly appears in the reflection,—as the under-side, for instance, of a tree, of an arch, or of a shed. These close objects approximate to the condition of those which we see reflected in the looking-glass. Their appearance corresponds better still, when a somewhat elevated position affords us a view of the opposite side of the object to that which is reflected in the water; as is the case, for instance, when from a high bank we see the back and shoulders of a sheep or cow standing in the water, though the throat and belly appear reflected; just as a person sees the back of his own hand which he holds up to the glass, whilst he sees the palm reflected.

The chief difference between objects which are reflected in the lake or river, and those which are reflected in the glass, independently of the impression of looking down, arises from their distribution, in the former case, on the extreme verge of the reflecting surface, which causes them to be seen obliquely and in the distance; whereas, in the mirror, the attention is chiefly called to the objects which appear full and conspicuous before you. The reversion of objects in the glass, certainly gives rise to a kind of departure from the reality, which

has something of an anomalous nature: as for instance, each eye, or each hand, has its corresponding reflection: but the reflection of the right eye, or of the right hand, is not, in our mind, the right eye, or the right hand, of the individual reflected; for his right members, in the position in which we see them, correspond with our own left. But this circumstance arises from nothing more than that mutual agreement which has decreed that one side of the human figure, and all that relates to it, should receive a name to distinguish it from the other. The result of this, with reference to the human figure, is, that the right hand becomes the left hand in the reflection, and *vice versâ*; for, as a person who looks this way, has his right hand in the opposite direction to what it would be were he looking the other way, so it is with his reflection,—right and left become reversed. The impression thus produced has little to do with the principle of reflection, and would disappear without the conventional distinction which has been made between the opposite members of the body.

REFLECTION IN PLANE MIRRORS.

A few Practical Hints.—The hints which follow are not intended as a means for ascertaining the relation of every definite reflection to its object, in a manner similar to that in which the form and position of real objects are determined with mathematical precision by perspective rule. Owing to the circumstance that the greater part, if not the whole, of the real subject, gene-

rally remains hidden to the observer who sees its reflection in a mirror, it would in many cases be useless to endeavour to connect the two in one illustration, by means of perspective lines. In the simplest relations of an object to its reflected image, the eye seems to feel the want of the necessary data for appreciation: and if to these indistinct impressions be added, in the representation of reflected images, the uncertainty which arises respecting the position of the mirror in the picture, as also respecting the position of the observer out of it, it would be found that the degree of precision attainable with an ordinary amount of care and attention, must be inferior to that which regards the direct appearance of natural objects. Nevertheless, the egregious mistakes which have been made, not only by inferior artists, but occasionally by the first masters of the old schools, shew the necessity that these points should be considered with a degree of penetration which they have not hitherto elicited. I will chiefly endeavour to call the attention of the student to some few points especially calculated to attract his notice, and which, like beacons on the trackless waste, may serve to guide him in the solution of the monotonous inquiry connected with reflection in mirrors; for the thorough understanding of which, however, it is particularly necessary that his own observation and judgment should be exercised.

Relative Distance of the Object and of the Mirror. —What has been said, under the subject of Perspective, to prove that the ingenuity of the artist ought, as far as possible, to furnish the observer with the means for re-

cognising his true point of sight, applies particularly with regard to those paintings in which is introduced the reflection of a figure, or of other conspicuous objects, in a mirror; for it is on the supposed distance of the observer from the mirror, compared with that of the object, that its size relative to that of its reflection depends. To an observer situated at a considerable distance from the mirror, the reflection of an object placed near it, must evidently appear nearly as large as the object itself: whereas, if the observer approach so near that the object becomes situated half-way between him and the mirror, its reflection will appear reduced to one-third of the size of the object; and, if the object be situated at only one-fourth of the distance between himself and the mirror, the image will appear to him seven times smaller than the object.

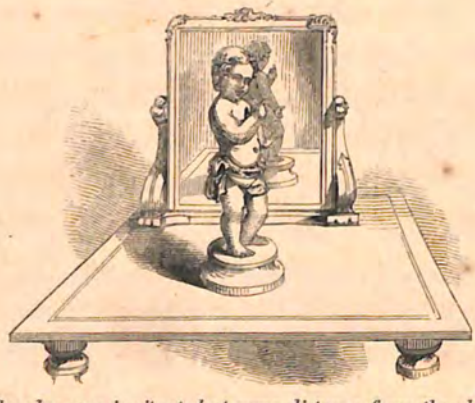
The principle on which the apparent reduction of the image takes place, may here be considered with advantage; as it leads at once to the definition of the proportions of the reflected image with regard to those of the object. The apparent dimensions of an image, seen in a plane mirror, are the same as would be those of the object, if its distance from the face of the mirror were added to that of the mirror from the observer, in a straight line; so that if the distance of the object from the mirror be the same as that of the spectator, the apparent dimensions of the image will be those of an object situated at a distance equal to twice that of the reflector. Supposing the object to be a sphere, that portion of its rays which is transmitted by the mirror to the eye of the observer, forms an elongated cone, gradually tapering

from the object to the mirror, and from thence back to the eye of the observer; and the image discernible in the former, is a section of the cone, more or less near to its apex or to its base, according to the relative distance of the observer and of the object from the mirror. Hence the appearance more or less diminished of the image, according to the greater or less extent traversed by the rays, in their double transit from the object to the mirror and from thence back to the observer; the difference between the apparent dimensions of the object and of its image, being exactly proportionate to the difference between the distance traversed by the rays which meet the eye of the observer in a direct line, and those which reach him only after having been reflected by the mirror. If a series of mirrors be so distributed that an object is reflected successively from one to another, and ultimately to the observer, the image in the last mirror will seem to him to be reduced in proportion to the whole amount of space comprised between the different mirrors, and may thus appear to be at a considerable distance, although the object itself be close to the observer.

Since round balls, jugs, and plaster casts, though common objects, are reflected with a clear and distinct image, in an ordinary looking-glass, why should not the eye of the draughtsman who is not careless with regard to precision in art, be frequently exercised in observing the appearance of the like objects as reflected under various circumstances? He would soon be able to determine the effects which would result from any change in the relations of the mirror to the position of the object or to his own; especially if he were to direct his attention to

the circumstance, that the apparent diminution of the image is in every case exactly relative to the length of the cone or fasciculus of rays, which, emanating from the object, is reflected back to the eye. He might observe, in the first place, that as he moves from a position at some distance from the mirror, to one still further off, the image of an object which is situated near its surface, continues to maintain nearly the same relative proportions (see Fig. 18): and secondly, that when he

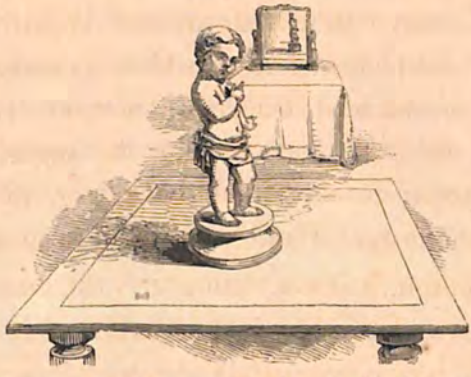
Fig. 18.



The observer is situated at some distance from the object, which itself is near the mirror.

himself remains stationary, but causes the mirror to be moved backwards, the result is a very rapid diminution of the reflected image; for, by the removal of the mirror, the fasciculi of rays which convey to the eye the reflection of the object, become lengthened simultaneously both before and after being reflected by the mirror (see Fig. 19). In this case, the perspective change is confined to the image; and by comparing its proportions with those of the object, which remains stationary, it will be seen to have undergone a very decided

Fig. 19.



The mirror has been moved backward; the observer and the object remaining stationary.

diminution. When, the observer and the mirror being stationary, the object is moved away from the latter and toward the observer, although the diminution of the reflected image is less rapid than when the mirror itself was removed, the difference between the apparent size of the image and that of the object, becomes decidedly greater than in either of the two former cases; for although the removal of the object from the mirror lengthens the cone of rays at one end only, yet, as the same motion of the object brings it nearer to the observer, it is seen by him closer at the same time that its image appears more distant; and an excessive difference in their apparent dimensions ensues (see Fig. 20).

With regard to the perspective of an apartment containing various objects, that of the reflection appears to correspond exactly, in an upright mirror which is parallel with the observer or with the plane of the picture if it be a representation. The point of sight is situated exactly opposite the point of sight of the same objects in

the reality, and follows the eye of the observer as he moves sidewards before the glass, fixing itself immediately in front of his eye. In the reflection, however, the vista seems lengthened, as compared with the scene reflected; the various objects appearing to be removed from a near position to a more distant one. This does not prevent the perspective principle which governs the real subject, from prevailing in the reflection; as will at once become obvious by a glance at any upright mirror. There are, however, some few differences between the reflection and the reality, which, if not pointed out, might easily be overlooked in a representation of the effects here referred to.

Fig. 20.

The object has been moved toward the observer; the distance of the mirror being the same as in Fig. 18.

In the first instance, an observer who faces the end of a room, obtains, by simply turning his head to the right or to the left, a front view of the objects which are on a line with him on either side; whereas, in the reflection, he discovers these objects situated on the side of the room at some distance before him, and thus obtains a more or less side or profile view of them according to the extent of their apparent removal, which is determined by the distance of the glass from the observer.

Relative Position of the Object and of the Mirror. —Let us consider some other points with regard to this subject. Supposing that I have before me on the table, an object—a plaster cast, for instance—and behind it a looking-glass: let us observe to what changes the object and its reflection will become subjected with reference to one another, when I move sidewards. If the cast, which I suppose to be that of a head, be situated between me and the surface of the glass, so as to be seen in profile (as in Fig. 23, p. 434), a sideward motion, which would afford me a three-quarter view of the head, would not have the same result with regard to its image; of which my change of position would enable me to discover very little, beyond the portion of the face seen with a profile view. A diagonal view enables me to see round the plaster figure to a point equal to one-eighth of its circumference; whereas (supposing it to be situated halfway between the eye and the mirror) the same change in my position would only produce a difference of one-twenty-fourth, with regard to the point discoverable on the circumference of the reflected image. (Observe, in

Fig. 21, the outline of the reflected image compared with that of the figure). It is therefore necessary, in drawing a three-quarter view of a figure placed before a mirror, to mark the situation of the point of sight, and to make such perspective arrangements as will show that the three-quarter view of the head is owing to the sideward position of the observer, and not to its being partly turned round; for if the three-quarter view of the figure, instead of being due to the sideward position of the observer, resulted from the turning of the object towards

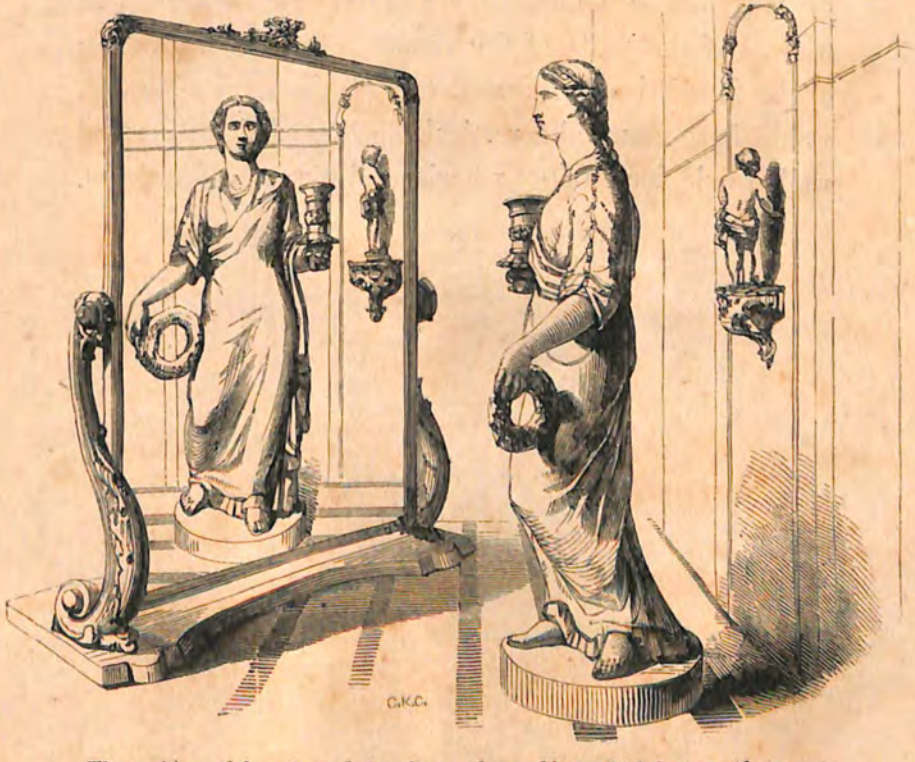
Fig. 21.

The figure looks in a direction which is nearly parallel with the mirror, but is seen by the observer from a diagonal position.

him, the reflected image would be turned round in the contrary direction, showing partly the back of the head and shoulders; as is seen in Fig. 18.

But the direction of the mirror is a point of still greater importance; for the least deviation of its plane causes, at once, a marked and striking difference in the appearance of the objects there reflected: in fact, for every degree of deviation in the position of the mirror from its parallel direction, the objects reflected in it appear turned round exactly twice that amount. A glass which is turned round, if I may so express myself,

Fig. 22.



The position of the mirror being diagonal, an object which is seen sideways, or in profile, appears full in the reflection.

one-sixteenth of the compass, presents a three-quarter view of the same objects of which the reflection afforded a side view when the direction of the mirror was parallel; whereas, a mirror placed diagonally, or turned toward the observer one-eighth of the circle, affords a side view of those objects which, with the parallel position of the mirror, would be seen in front, and a front or full view of those which would be seen sidewards. (See, preceding page, Fig. 22, the position of the large figure reflected in the glass, as well as that of the small image). It will be seen by Fig. 23, how a slight inclination of the glass forwards, amounting to only 16°, produces a considerable slant in the appearance of the figure reflected, as well as of the walls of the room. Had the inclination of the mirror been increased to 45°, the level table, &c. would have assumed a vertical position, and the vertical walls would have taken a horizontal direction over-head.

Fig. 23.

The figure, being situated between the observer and the mirror, its reflection is seen profile. The inclination of the reflected image forward is equal to twice that of the mirror.

An inclination of the mirror upwards, to the same amount, produces exactly the converse of this effect. This double amount of change produced in the images reflected, for every single turn of the mirror, cannot be overlooked without producing great discrepancies in the imitation.

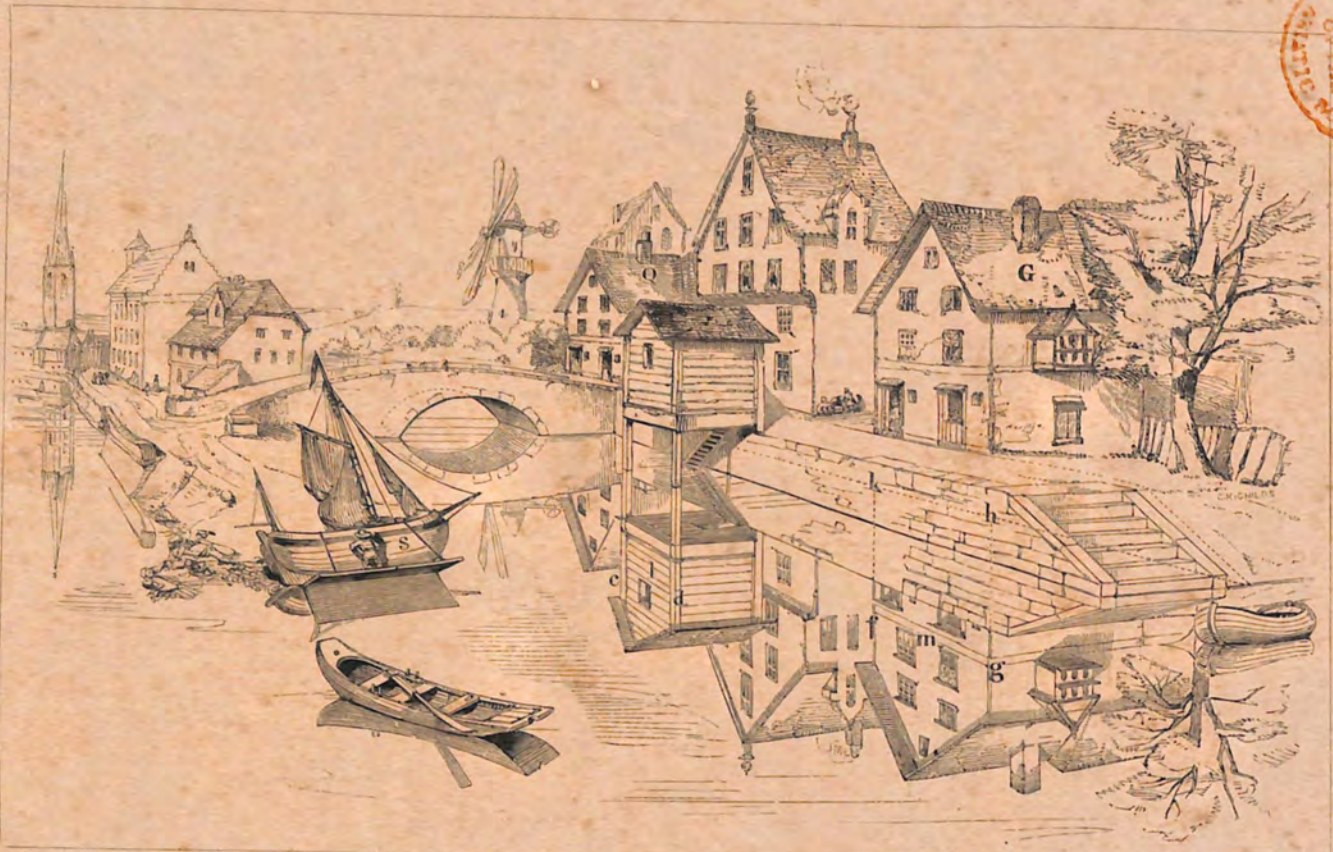
False attitudes and positions are of frequent occurrence in representing objects which are reflected in oblique mirrors; and in many cases, although the representation be correct, the effect appears false to some persons, owing to their little habitude of judging of the various circumstances which influence reflections in mirrors. What is chiefly wanted with regard to the reflection of rounded forms is, the tuition of the eye by observation; in the same manner as experience and practice are required, more than any thing else, with regard to the perspective of all forms in nature which, without being quite symmetrical, have a certain degree of regularity. It should especially be borne in mind, that such changes in the position of the observer as enable him to see the object itself under very different aspects, but slightly influence in most cases the outline of the reflected image; and that any striking difference between its appearance and that of the object, denotes at once a direction more or less slanting or oblique in the plane of the mirror.

With regard to the mistake, rather too clumsy to be common, of causing an object to appear reflected when the size and position of the mirror are such as not to allow of its being visible, no rules, perhaps, can supersede the tuition of experience. Technically speaking, however, no object can be seen reflected, unless the plane

of reflection comprised between a line drawn from the eye to the object and a line drawn from the eye to its image, is perpendicular to that of the reflecting surface. An object which is above the eye, cannot be seen reflected in a vertical mirror the top of which is below or on a level with the eye; because on no part of such mirror could the plane of reflection be perpendicular to its own plane. The same rule applies to an object having any corresponding position relatively to the mirror and to the observer. Another consideration is, the similarity of the angles of incidence and reflection; and it need only be added, that no object can be seen reflected in a mirror, owing to the position or smallness of which, this equality of the angles of incidence and reflection would not take place on its surface. A little exercise in adjusting objects so that they might be seen reflected in a small mirror, or on a given part of a large one, would soon accustom the eye to these truths, and render them far more practically useful than would do more precise definitions.

REFLECTION ON SMOOTH WATER.

The perspective of objects which are reflected on water, does not present the circumstantial difficulties which attend the representation of the features, or of the whole figure, reflected in a looking-glass. The scene affords, it is true, a variety of objects receding one behind another; but their inverted reflection on smooth water has the same point of sight, and the same points



EXAMPLES OF VARIOUS OBJECTS REFLECTED ON SMOOTH WATER.

of distance, as the real objects. In fact, we see in the reflection but the complement of the reality: it forms as it were part of the same whole in the vanishing progression of the scene. The outline of the real objects being always planned the first, the perspective of the reflection becomes in a manner already determined: and the simple method of drawing a perpendicular from the foot of the object on or bordering the water, downwards to a point situated at a distance equal to the elevation of the object above its level, will serve, in almost every case, to mark the true extension and position of any object reflected on the water. (See, in the accompanying Plate, the perpendiculars, *c*, *d*, *f*, and *g*.)

Having thus obtained the position or downward extension of the leading points, the perspective of the horizontal divisions is easily found, by tracing thence lines to the common vanishing point of the object and of its reflection. Or the process of carrying on the horizontal lines to the vanishing point may be altogether avoided: for if the extension of perpendiculars, such as *c* and *d*, or such as *f* and *g* belonging to the foremost house, be first marked, lines, such as *l* and *m*, from one of the points thus determined to the other, give the true perspective inclination of the horizontal parts and divisions of the buildings to which they belong, without its being necessary to continue any of these lines to the vanishing point in order to find out their true convergence.

It is true that the depth of vertical objects reflected, cannot always be determined by measuring it from the edge of the water. This can only be done when the object stands on the very border. If it be situated as it

were inland, it is necessary to measure the length of the reflection from the point at which the level of the water would meet the foot of the object, supposing that it were to extend so far. When the house, of which I am drawing the reflection, is situated on a bank or quay, and removed to some distance from the edge of the water, I do not perceive at once to what point the basement of the house would reach if the water were extended to its foot. In this case, I should recur to the method indicated by the dotted lines for finding out what would be the edge of the water if it were to extend right under the foot of the house; tracing, from this removed position of the bank, the perpendiculars *h* and *k* downwards, till they corresponded with the elevation of the house, or of any portion of it, added to the height of the bank on which the house stands.

It may be observed that much is seen of the underside of the flooring of the little boat-house to the right in the reflection; whereas it is not seen at all in the same object out of the water. The exact amount of the under-surface of this boat-shed which is visible in the water, is, however, easily determined; its form being indicated by the meeting of the horizontal lines drawn, as before said, to the point of sight, with the vertical lines of the sides: and the view of the flooring in the reflection is conformable to the limits which have been thus determined. In the case of the bridge which is seen a little further off, I have no such guide for finding out its apparent width in the reflection: but I might suppose the unseen portion of the arch itself to be continued, as shown by the dotted line; and having thus

satisfied myself as to the position of the further boundary of the real arch, I draw a corresponding curve on the surface of the water, the space included between which and the nearer curve of the inverted arch, gives the exact width in the reflection.

Where the usual means for determining the reflection of objects variously inclined are wanting, the draughtsman obtains some general assistance in tracing them, if he can, without really quitting his position, fancy himself viewing the object, of which he intends to draw the reflection, from the very spot at which he sees its image on the water. For instance, I put the question, "How much should I see of the slope of the roof G, if I were to take a position on the water at the point where I see its reflection according to the present distribution of the objects in the plate?" I am aware that from that point the roof would appear very much foreshortened,—consequently, that I should see very little of it. Supposing, therefore, that I had not at my disposal the means afforded by the intersections of the perspective lines, I should allow myself to be guided, in executing the reflection of the roof, by the degree of contraction which I am aware the roof itself would present to the eye if observed from the spot alluded to. It is therefore not immaterial to consider at what point the incidence and reflection of the rays takes place on polished surfaces. In fact, the reflected image corresponds, in every case, whether it be in a looking-glass or on the water, with that view of the object which would be obtained could the observer transport himself to

the very point where its image appears to him to be reflected.

Very little, it may be perceived, is seen of the reflection of the steps on the right, under the house. I suppose the slope of the steps to be about 40°; and I likewise suppose that the observer looks down in nearly the same angle at the point where the steps sink into the water. It is evident that at that point, the angle of reflection corresponds with that of incidence of the whole flight of steps. An observer there situated, could see nothing of their plane or general surface: and an observer situated at any point, above the level of the water, at which the angle of reflection would be the same, would consequently see nothing but the first step reflected; and yet, from any such point, if considerably elevated, a full unforeshortened view would be had of the steps themselves.

If the plane of the object, instead of sloping away from the observer, is inclined towards him, the relative appearance of the reflection becomes reversed. For instance, if the observer look down upon the surface of the water at an angle of 45°, it is when the object is inclined toward him with the same angle, and is consequently so completely foreshortened as to show neither surface, that its reflection appears fullest. The inclination of the boarding which supports the boat *s*, to the left of the plate, is supposed nearly to correspond with the plane of the observer's eye. It therefore appears to him much foreshortened; whereas in the reflection it appears nearly full.

But the extent which is seen reflected of the surface of any object, is influenced at the same time by the position of the observer, and by the remoteness or proximity of the object reflected. It may be stated, in general terms, that with a near view the reflection appears to differ much more widely from the object, than with a distant view. Thus, with regard to the boat which is situated on a near part of the canal—almost in the foreground of the scene,—you see a good deal of the flat bottom reflected; whilst in the boat itself, you see the upper surface of the same boarding: but had I placed a similar boat in the distance—beside the bridge for instance,—its appearance and that of its reflection would have assimilated more. The gables of the houses G and Q are similar; but it may be observed that with regard to the house designated G, much less is seen of the inclined roof in the reflection, in proportion to the roof itself, than with regard to the house Q, which is situated at a greater distance. The same principle of foreshortening influencing unequally the form of an object and that of its reflection, is shown by the appearance of a swan compared with that of its reflected image. At a distance, the appearance of the swan and that of its reflection seem almost to correspond; but as the bird approaches, and shows more fully the white plumage of the back, proportionably less is seen in the reflection; and when close, little more than the neck and head of the animal appear in the water. When there is a gradual ascent from the edge of the water, the less elevated the position of the observer, or the further the inclined slope is situated, the more he sees

reflected of its surface. Even such slopes as are very slight, as the gentle ascent of a hill, or of a rising ground, may be partly seen, when the observer is situated at the same time near the surface of the water and at a very great distance from the object.

It may be asked, whether the reflection of vertical objects is likewise influenced by their position, or by that of the observer. Their length becomes indeed considerably modified by such circumstances as these; the view which in nature is obtained of the reflection of a near object, being by no means a full one, but much more foreshortened than the view of the object itself. Nevertheless, the reflections of upright objects on smooth water are drawn, whatever be their distance, exactly as long as the objects are high. With regard to this point it should be remembered, that the object is drawn on a part of the canvas which is situated exactly opposite the eye, whereas the reflection of the same object extends downwards over a portion of its plane which is seen much foreshortened; and as this result takes place on the surface itself, exactly conformably to nature, it becomes quite unnecessary to account for any perspective influence by shortening the reflection.

Casting a general glance at the images which we see reflected on the surface of water, they call but slightly our attention to the fundamental principles of perspective under whose influence they are included; since they present but the repetition, under a different and modified form, of the same phenomena the explanation of which is more appropriately connected with the objects themselves. Softness, and the delicacy of the effect, here

chiefly engross our attention; and the varying and playful influence of winds and currents tends still further to bring those appearances which are characteristic of reflection on water, from the dominion of rule, under the gentler sway of taste. It is not my object to enter here into those effects peculiar to agitated water, which are more properly included in the subjects treated of in my work on the Picturesque; wishing for the present to leave my bark at rest on the tranquil stream, and content if, whilst I have induced some to explore with me the treasures of the visible world, I have rendered more clear to their understanding, those signs of the beautiful and of the marvellous, which, throughout all nature, are so forcibly impressed on the imagination.

THE END

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